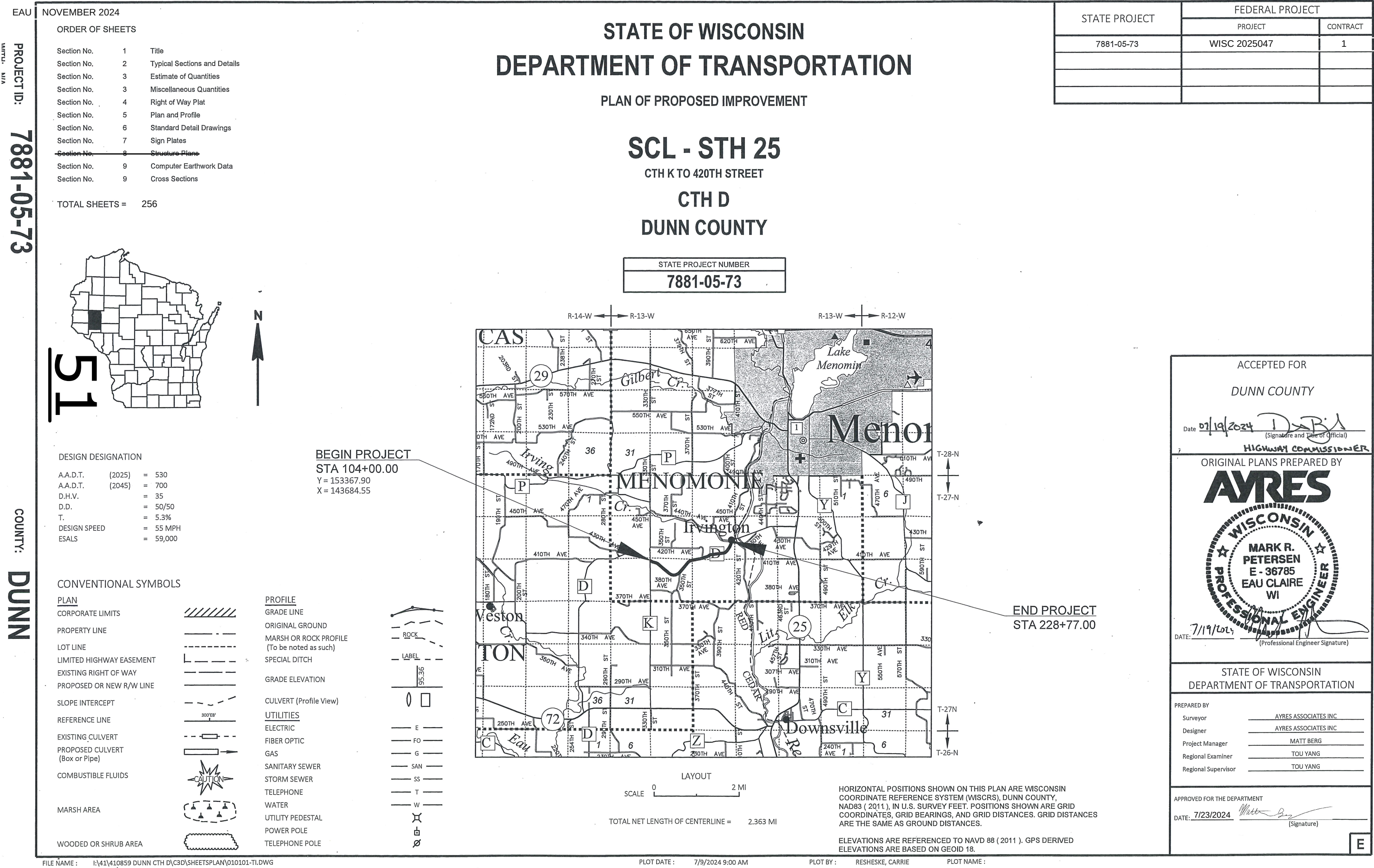




GENERAL NOTES

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA.

THE EXACT LOCATION AND WIDTH OF DRIVEWAY ENTRANCES WILL BE DETERMINED IN THE FIELD BY THE ENGINEER. ALL DRIVEWAYS ARE TO BE REPLACED IN KIND UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR AS SHOWN ON THE PLANS.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ON THE PLAN MAY BE ADJUSTED BY THE ENGINEER TO FIT FIELD CONDITIONS.

PRIOR TO ORDERING DRAINAGE PIPES AND ENDWALLS, VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN AND PROVIDE DOCUMENTATION TO THE ENGINEER.

ALL RADII ARE MEASURED TO EDGE OF PAVEMENT UNLESS OTHERWISE SHOWN OR NOTED ON THE PLAN.

PRIOR TO THE PLACEMENT OF MGS GUARDRAIL, THE SHOULDERS SHALL BE IN PLACE, SHAPED AND COMPACTED UNLESS SHOWN OTHERWISE.

Bore #	Station	Offset	Asphalt	Base
B-1	108+00	6' RT	3"	7"
B-2	125+00	6' LT	3"	5"
B-3	145+00	6' LT	3"	8"
B-4	162+00	6' RT	4"	8"
B-5	179+00	6' LT	3"	7"
B-8	204+00	6' LT	4"	6"
B-9	209+00	6' RT	3"	6"
B-10	215+00	15' LT	6"	8"
B-11	221+00	15' LT	4"	11"
B-12	227+75	15' RT	4"	7"

UTILITY CONTACTS

AT&T
304 SOUTH DEWEY STREET
EAU CLAIRE, WI 54701
ATTN: RICK PODOLAK
OFFICE: 715-839-5565
CELL: 715-410-0656
rp4514@att.com

DUNN ENERGY COOPERATIVE
N5725 600TH STREET
PO BOX 220
MENOMONIE, WI 54751
ATTN: TRICIA BAUER & LOREN LUZINSKI
715-232-6240
tricia@dunnenergy.com
loren@dunnenergy.com

WEST WISCONSIN TELCOM COOPERATIVE
912 CRESCENT STREET
MENOMONIE, WI 54751
ATTN: BRAD SCHMIDTKNECHT
715-231-0504
brads@wwt.net

XCEL ENERGY
414 NICOLLET MALL
MINNEAPOLIS, MN 55401
ATTN: MITCHELL DIENGER
612-321-3109
michell.a.dienger@xcelenergy.com

* DENOTES NOT A DIGGERS HOTLINE MEMBER



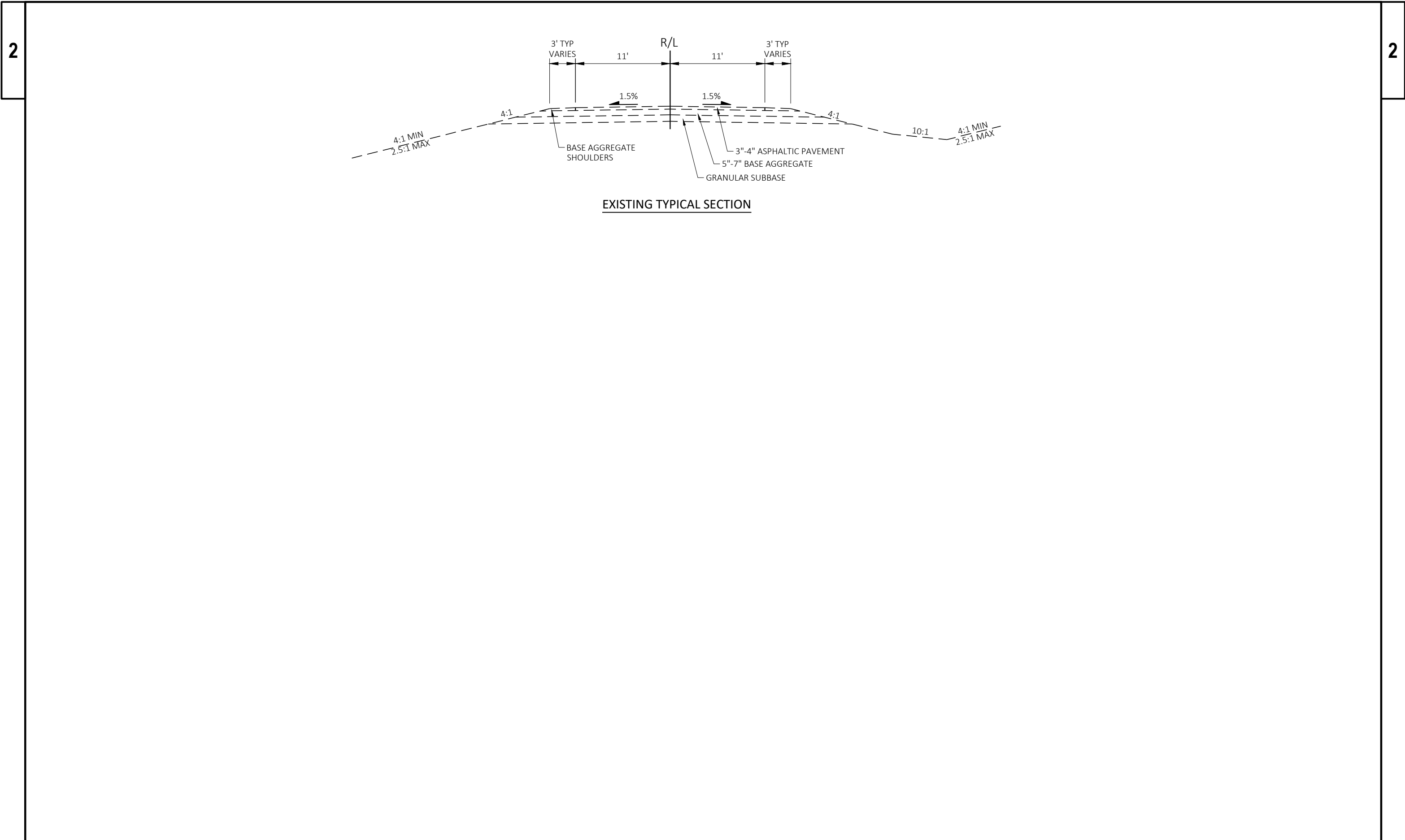
Dial 811 or (800)242-8511
www.DiggersHotline.com

DNR CONTACT

DNR WEST CENTRAL REGION HQ
1300 WEST CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
ATTN: LEAH NICOL
715-934-9014
leah.nicol@wisconsin.gov

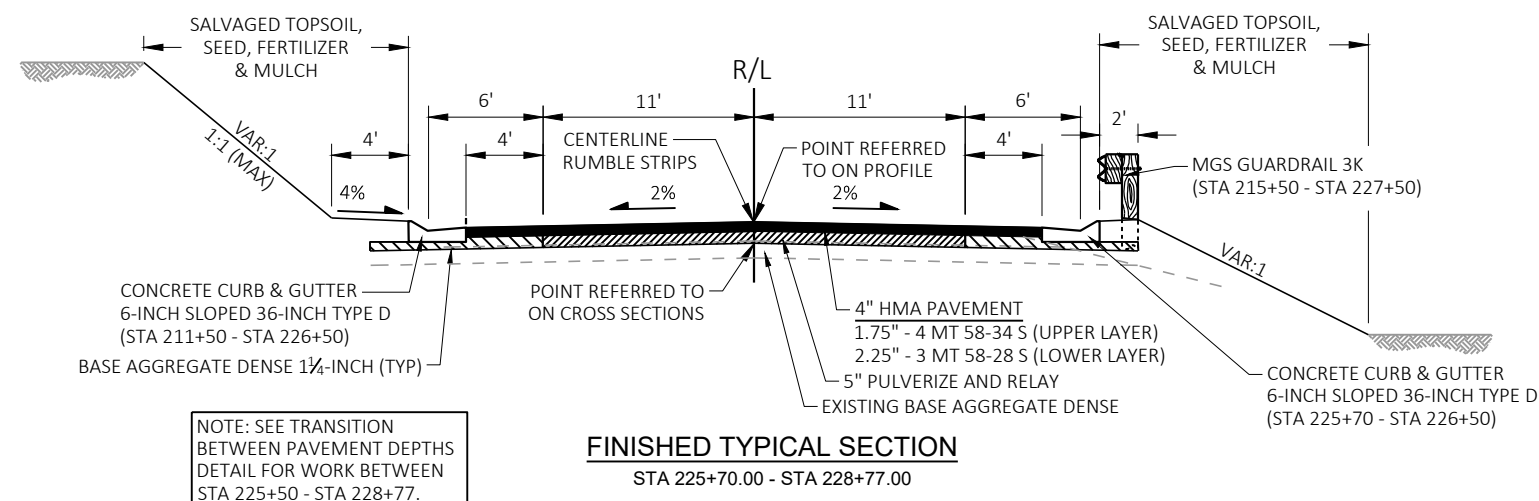
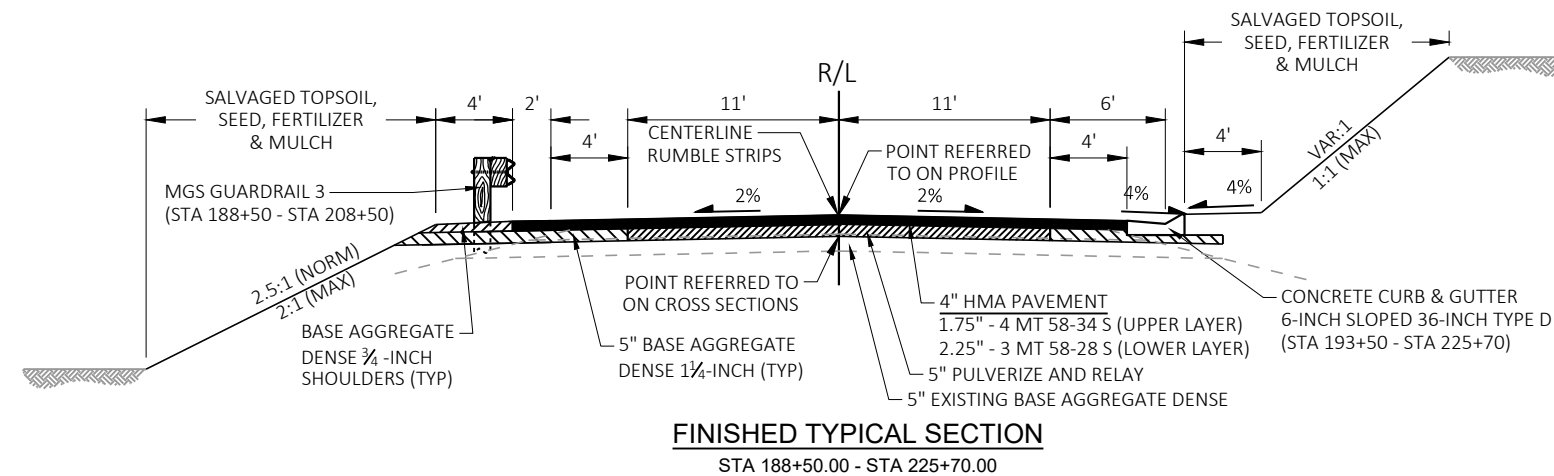
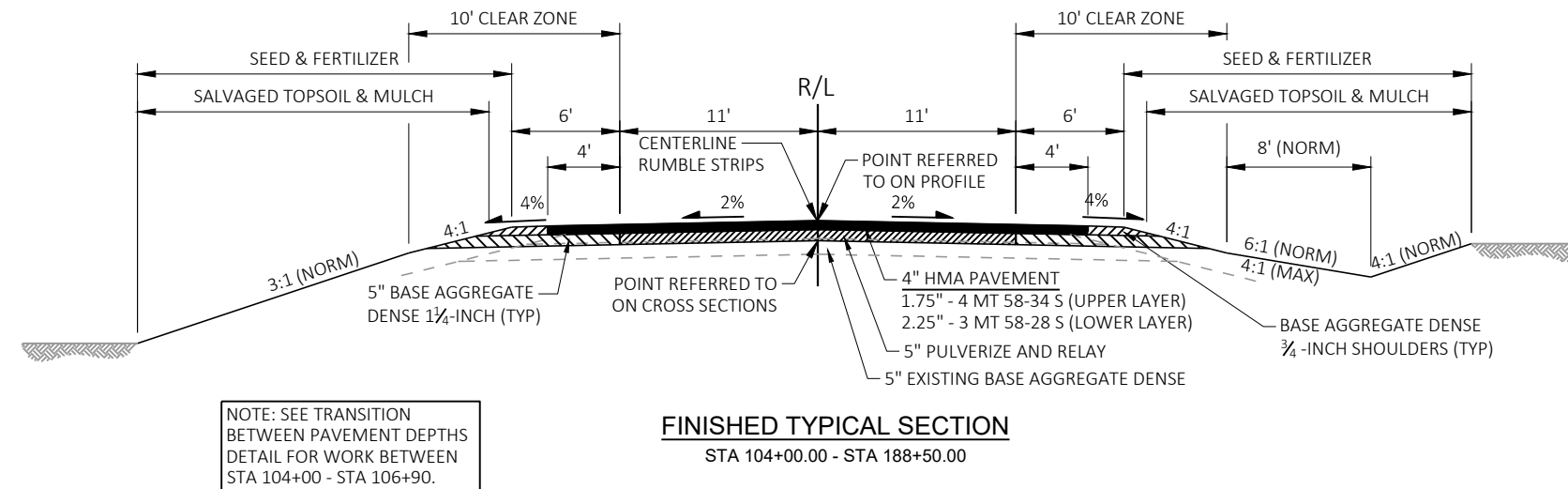
DESIGN CONTACT

AYRES ASSOCIATES INC
3433 OAKWOOD HILLS PARKWAY
EAU CLAIRE, WI 54701
ATTN: MARK PETERSEN, PE
715-834-3161
petersenm@ayresassociates.com



2

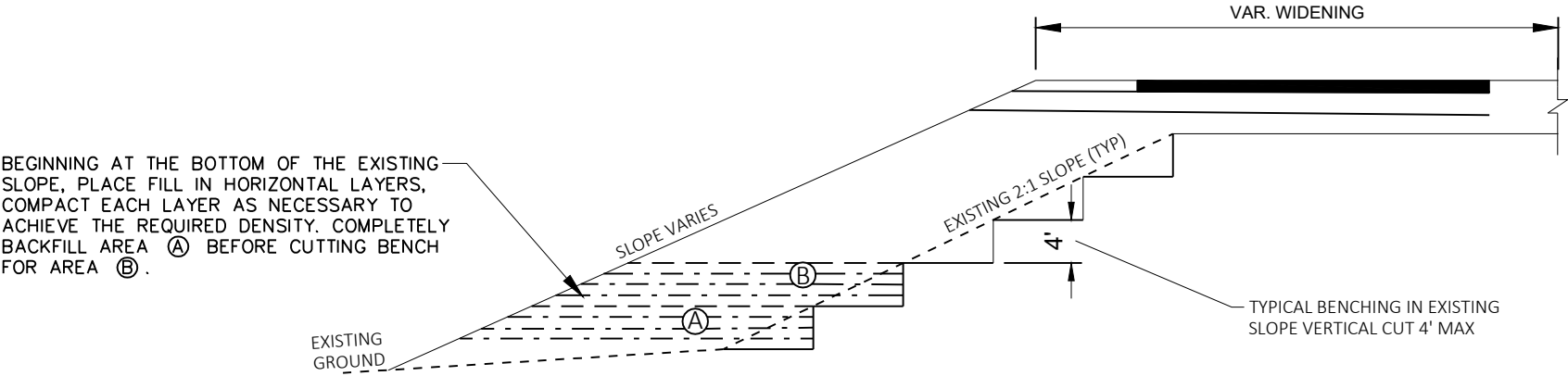
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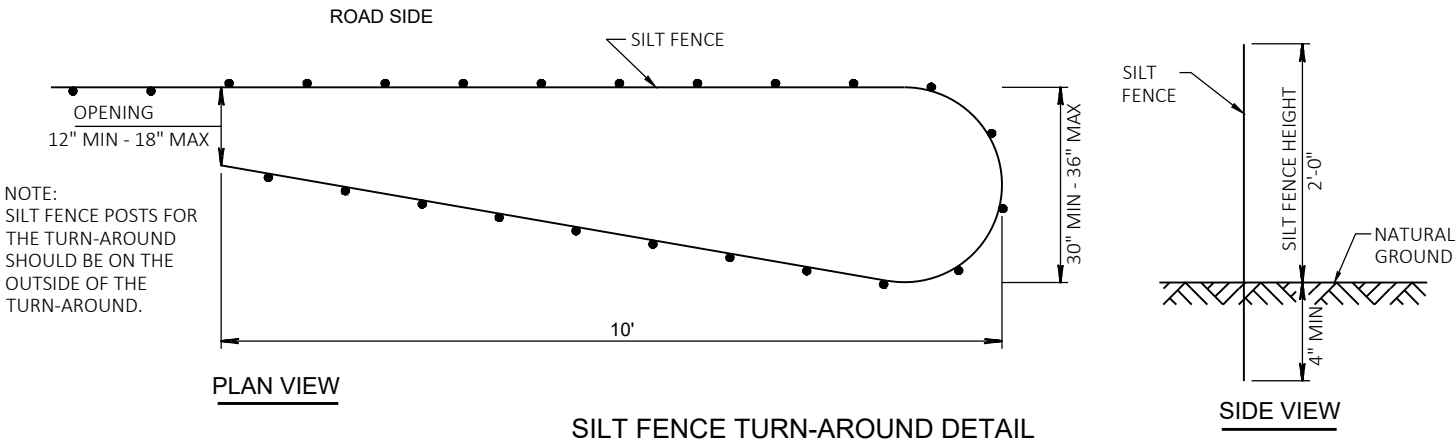
RUNOFF COEFFICIENT TABLE

LAND USE:	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS:	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIPTURF:	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPETURF:			.25			.27			.28			.30
			.32			.34			.36			.38
PAVEMENT:												
ASPHALT:	.70 - .95											
CONCRETE:	.80 - .95											
BRICK:	.70 - .80											
DRIVES, WALKS:	.75 - .85											
ROOFS:	.75 - .95											
GRAVEL ROADS, SHOULDERS:	.40 - .60											

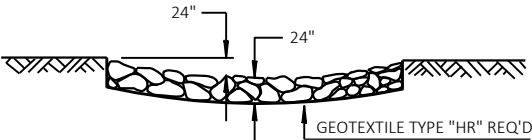
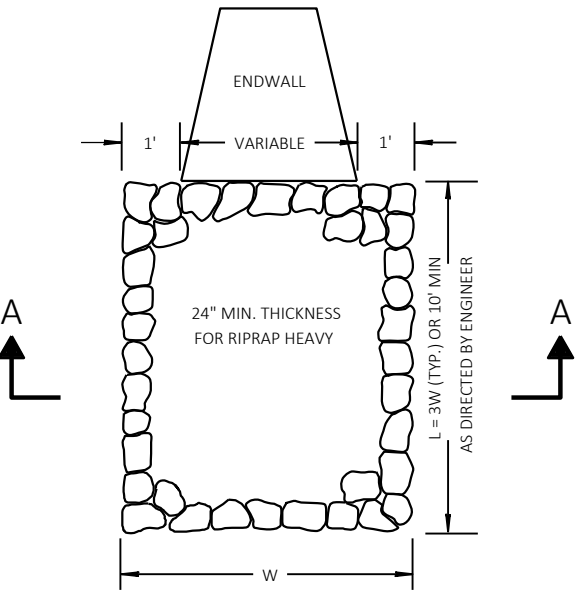
TOTAL PROJECT AREA = 27.51 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 20.34 ACRES



DETAIL SHOWING METHOD FOR BENCHING FILL INTO EXISTING EMBANKMENT

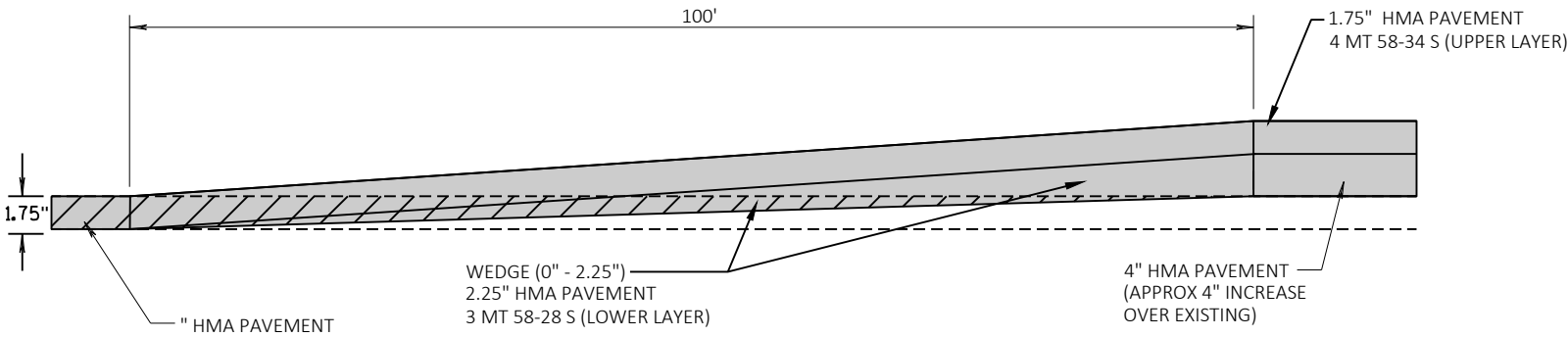
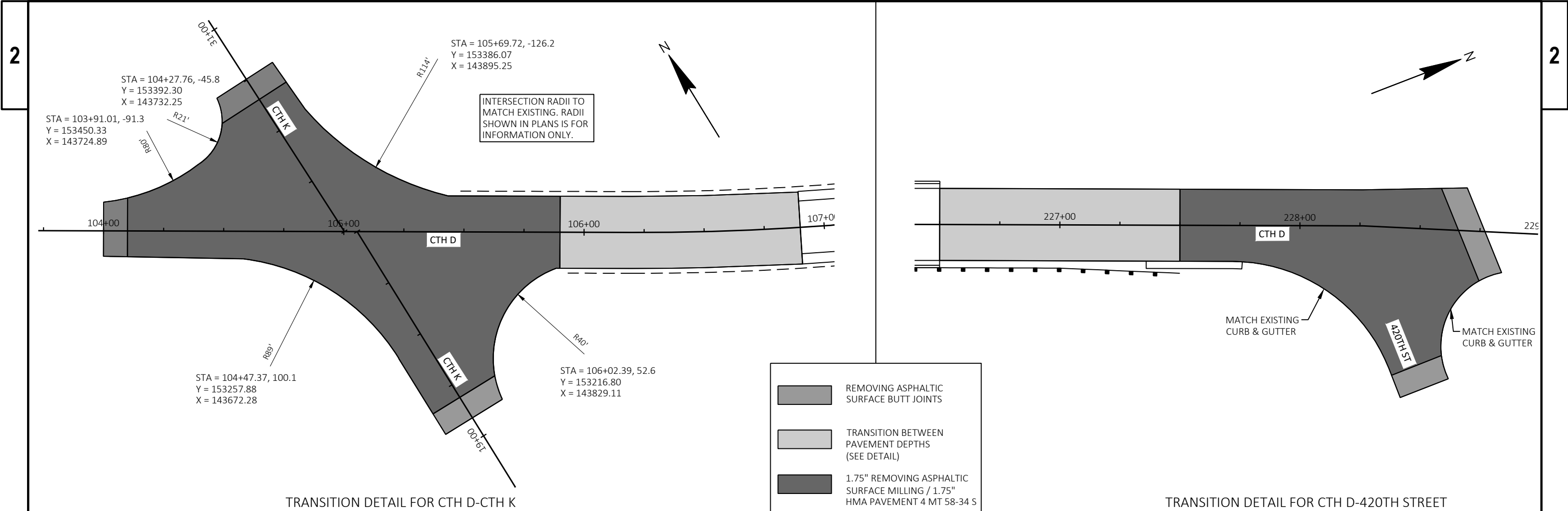


SILT FENCE TURN-AROUND DETAIL

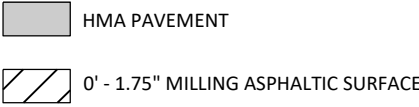


SECTION A-A

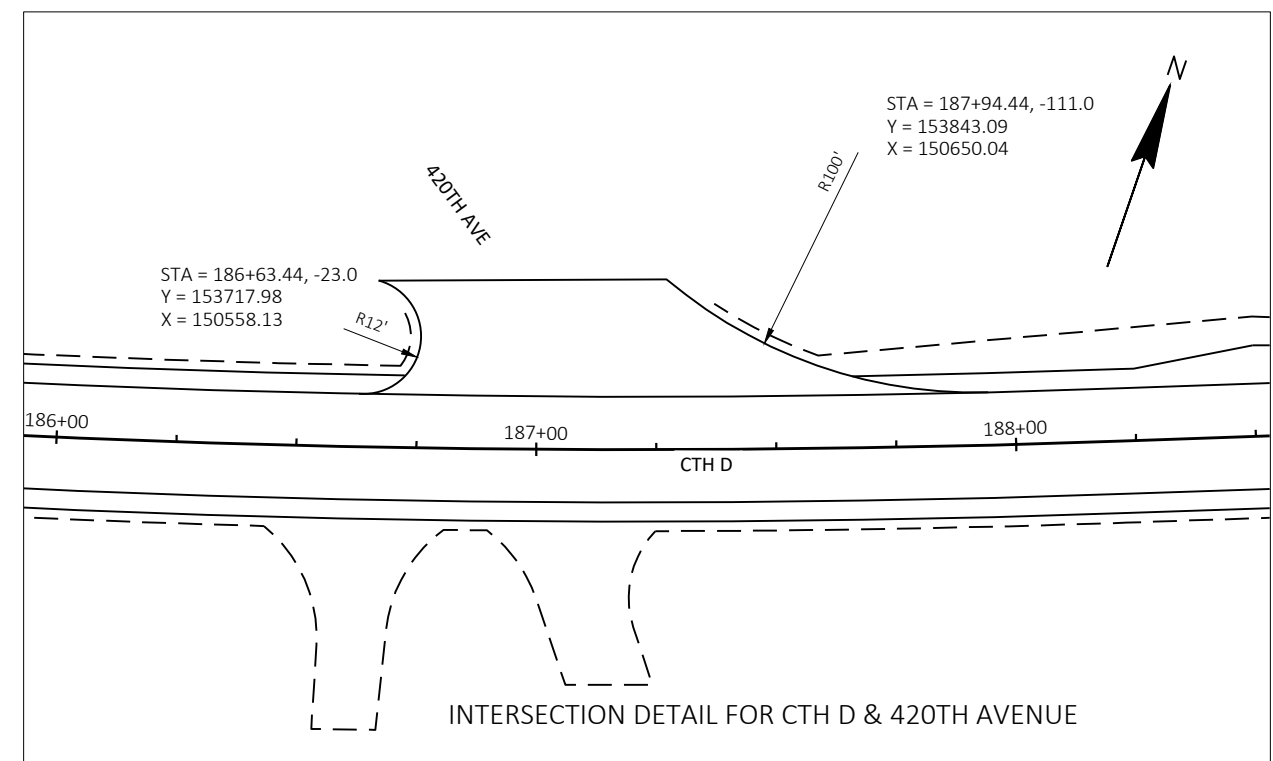
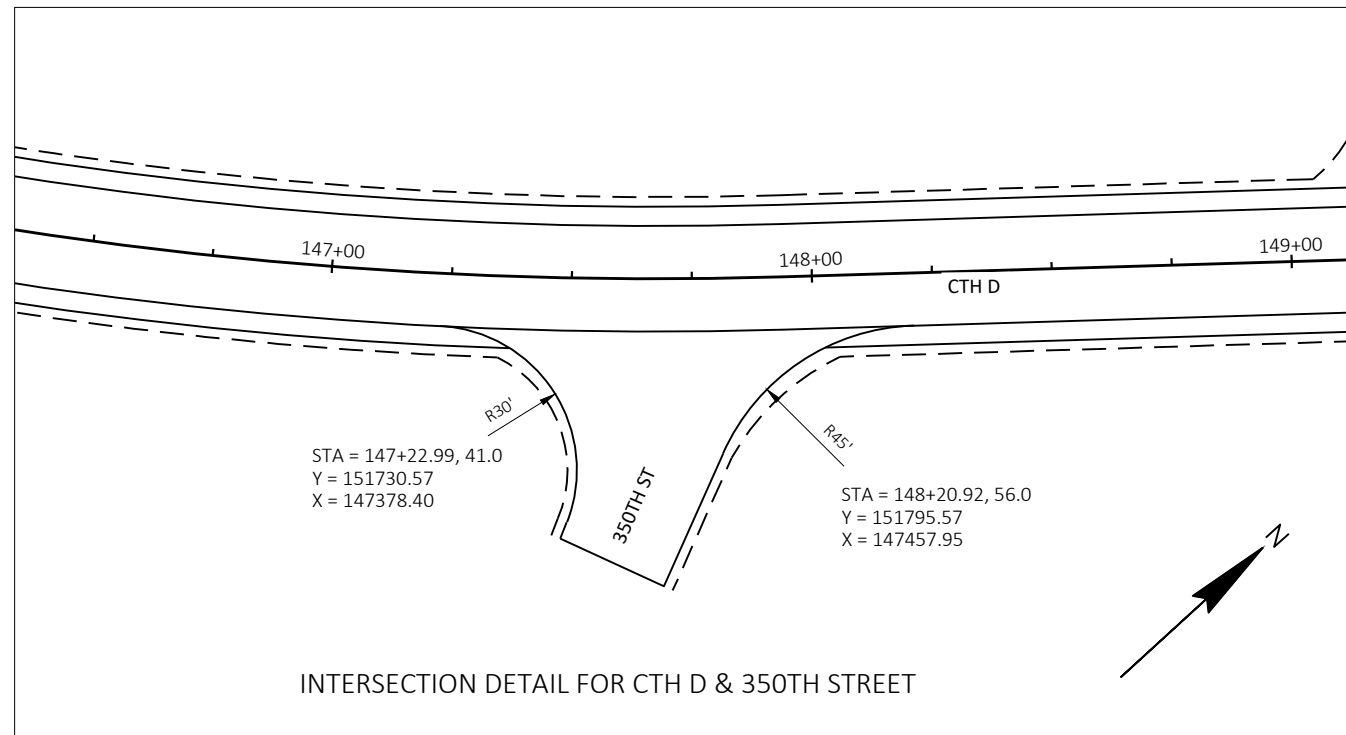
RIPRAP HEAVY AND GEOTEXTILE FABRIC
DETAIL AT APRON ENDWALL



TRANSITION BETWEEN PAVEMENT DEPTHS DETAIL

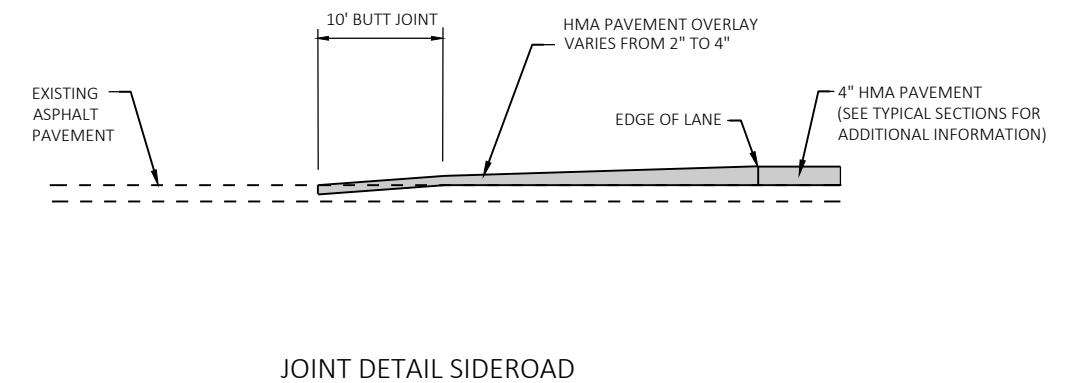
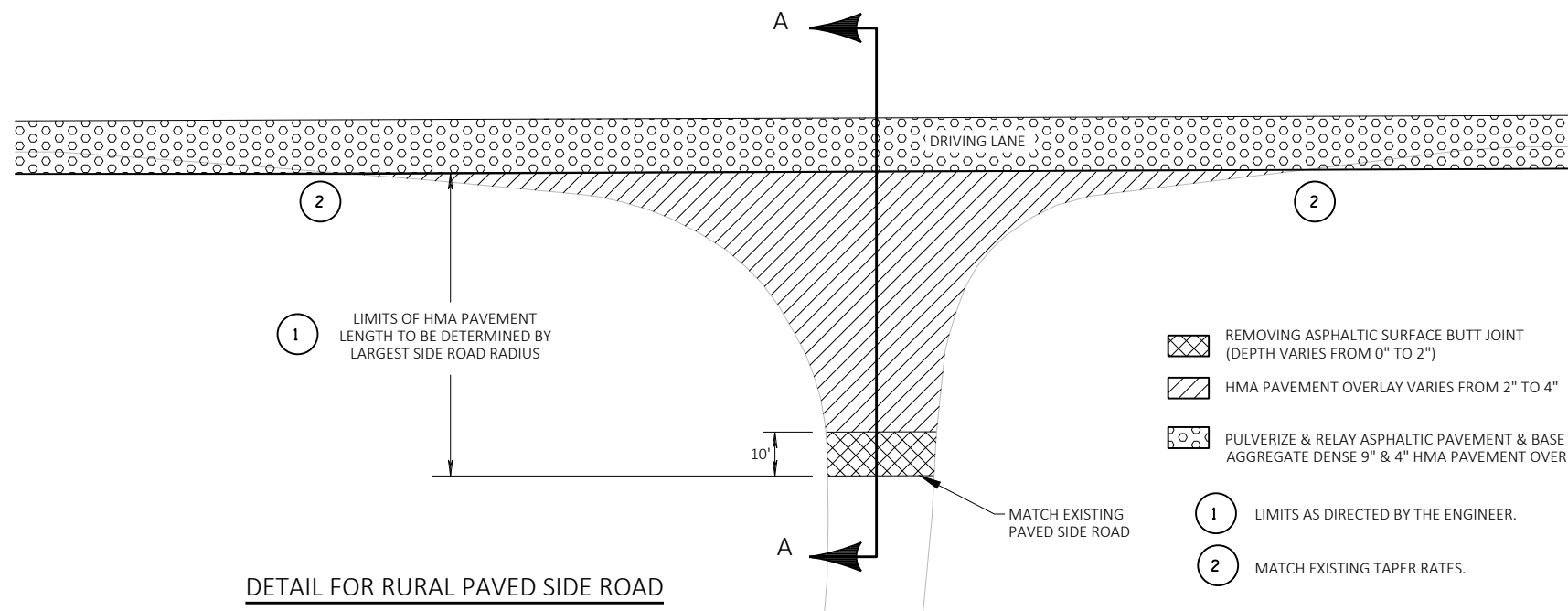


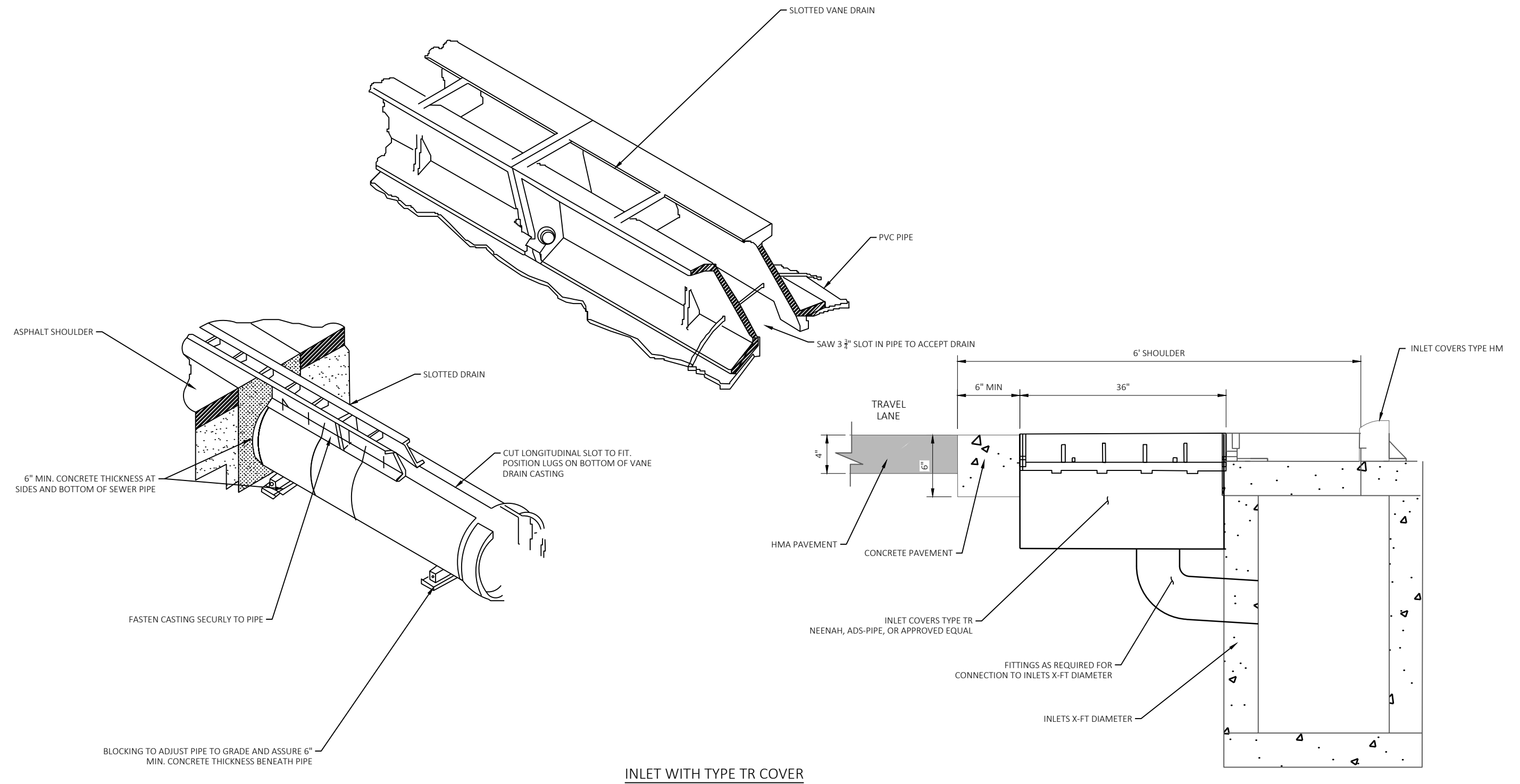
STA 105+90 - STA 106+90
STA 225+50 - STA 226+50

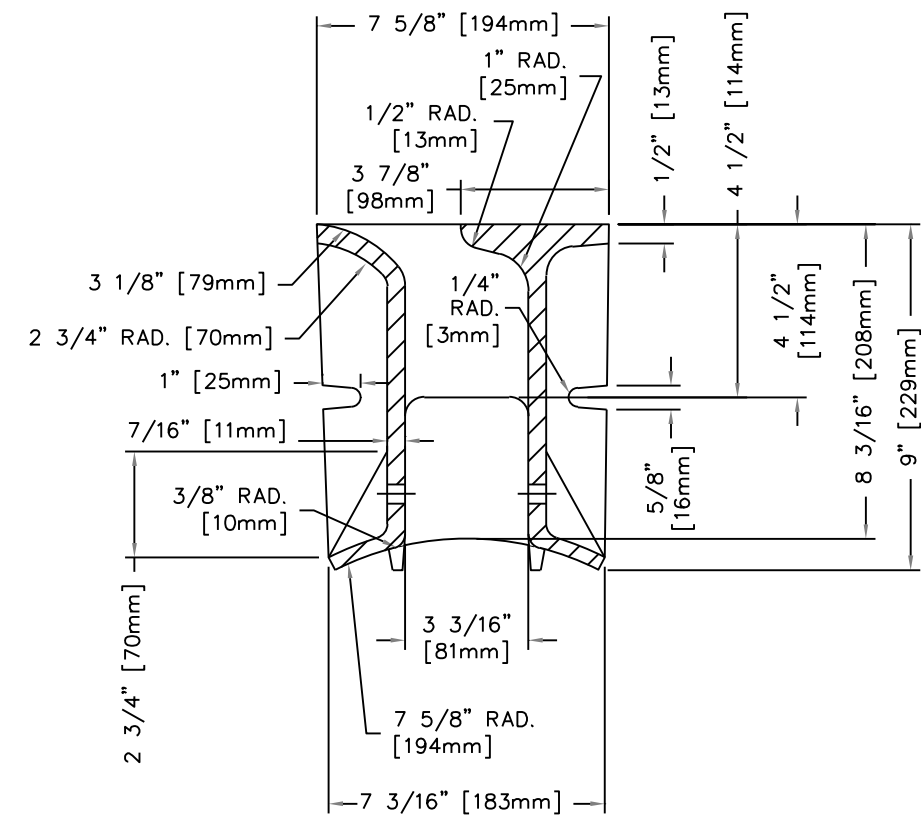
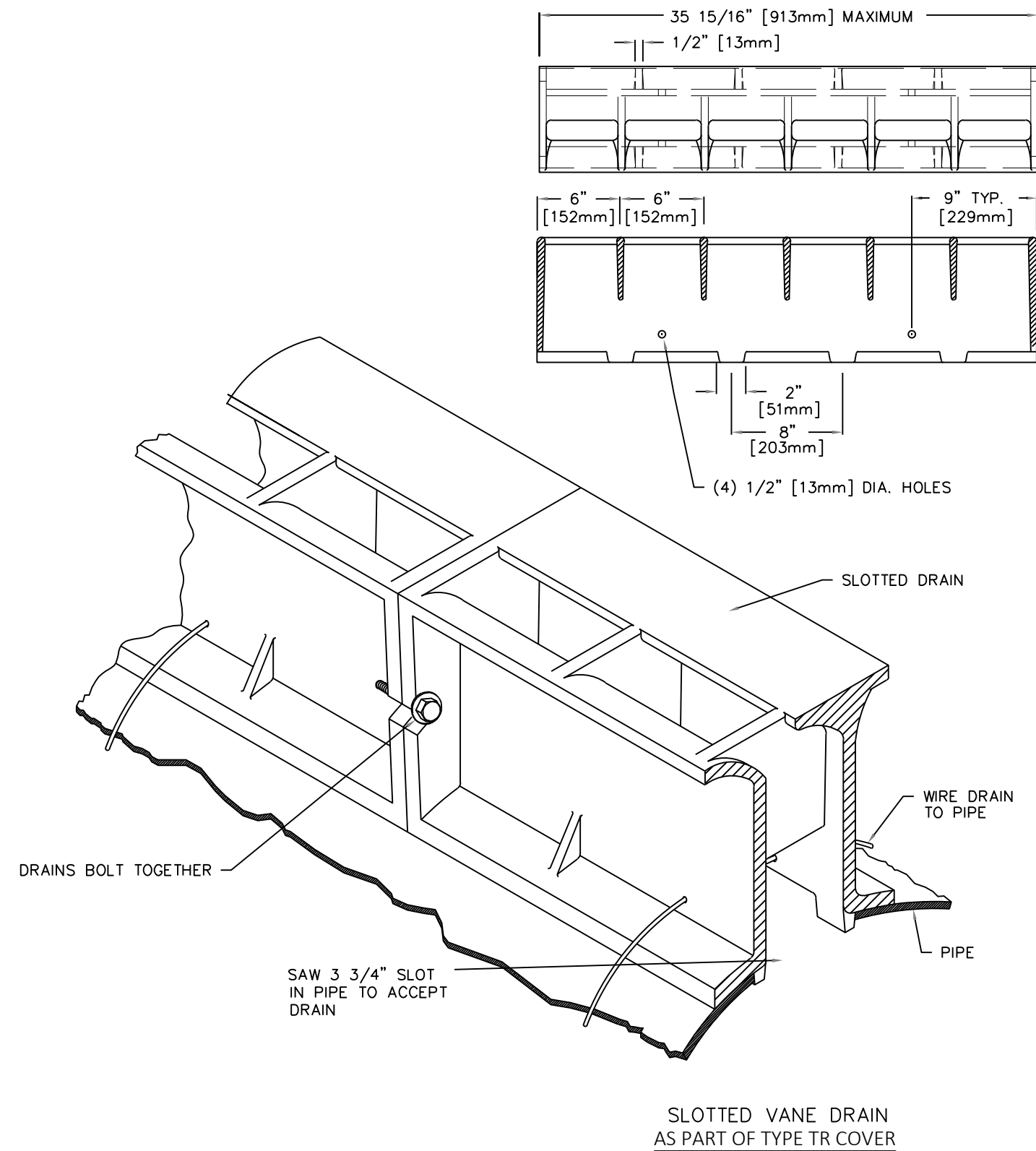


INTERSECTION RADII TO MATCH EXISTING. RADII SHOWN IN PLAN IS FOR INFORMATION ONLY.

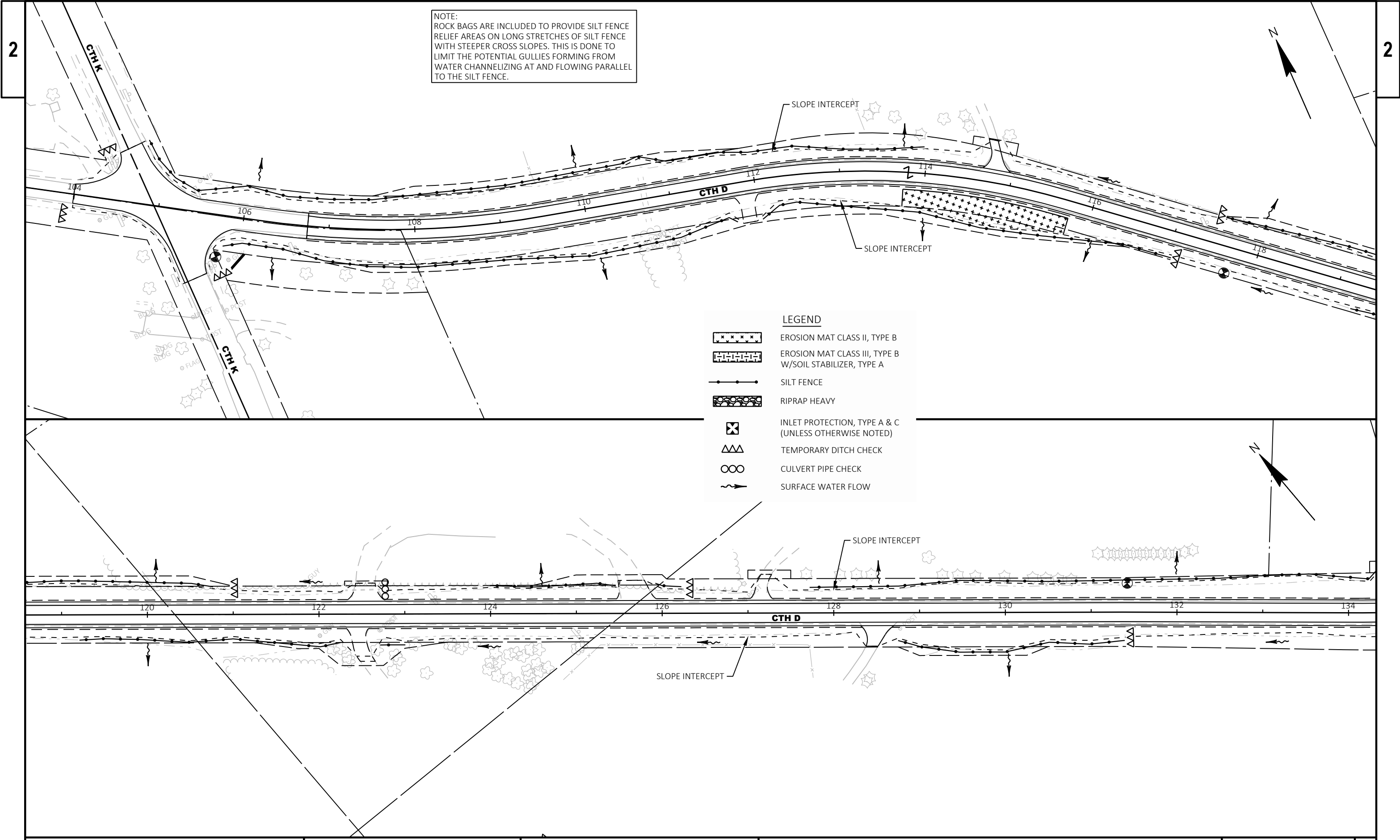
SEE MISCELLANEOUS QUANTITIES FOR REMOVING ASPHALTIC SURFACE ITEMS.

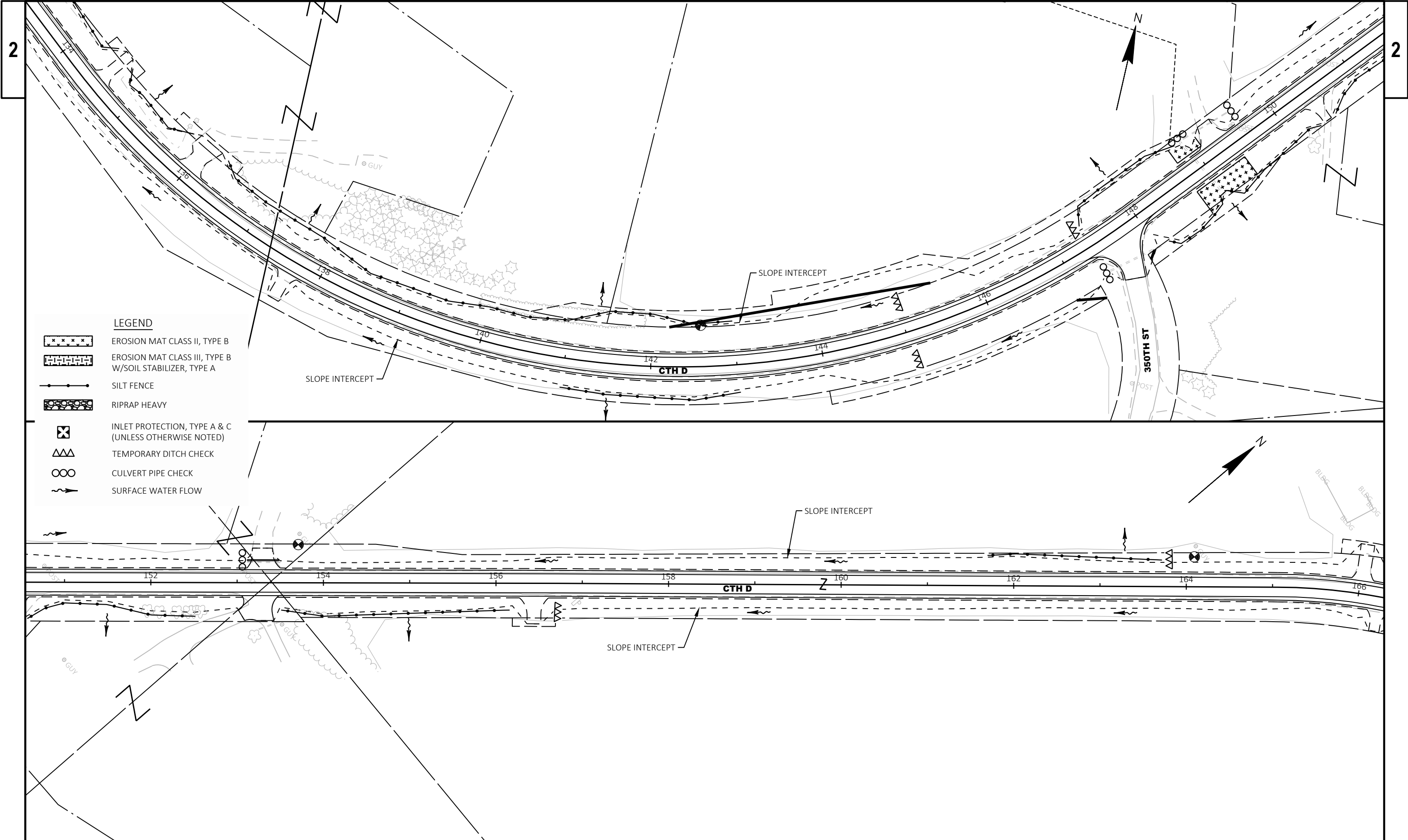


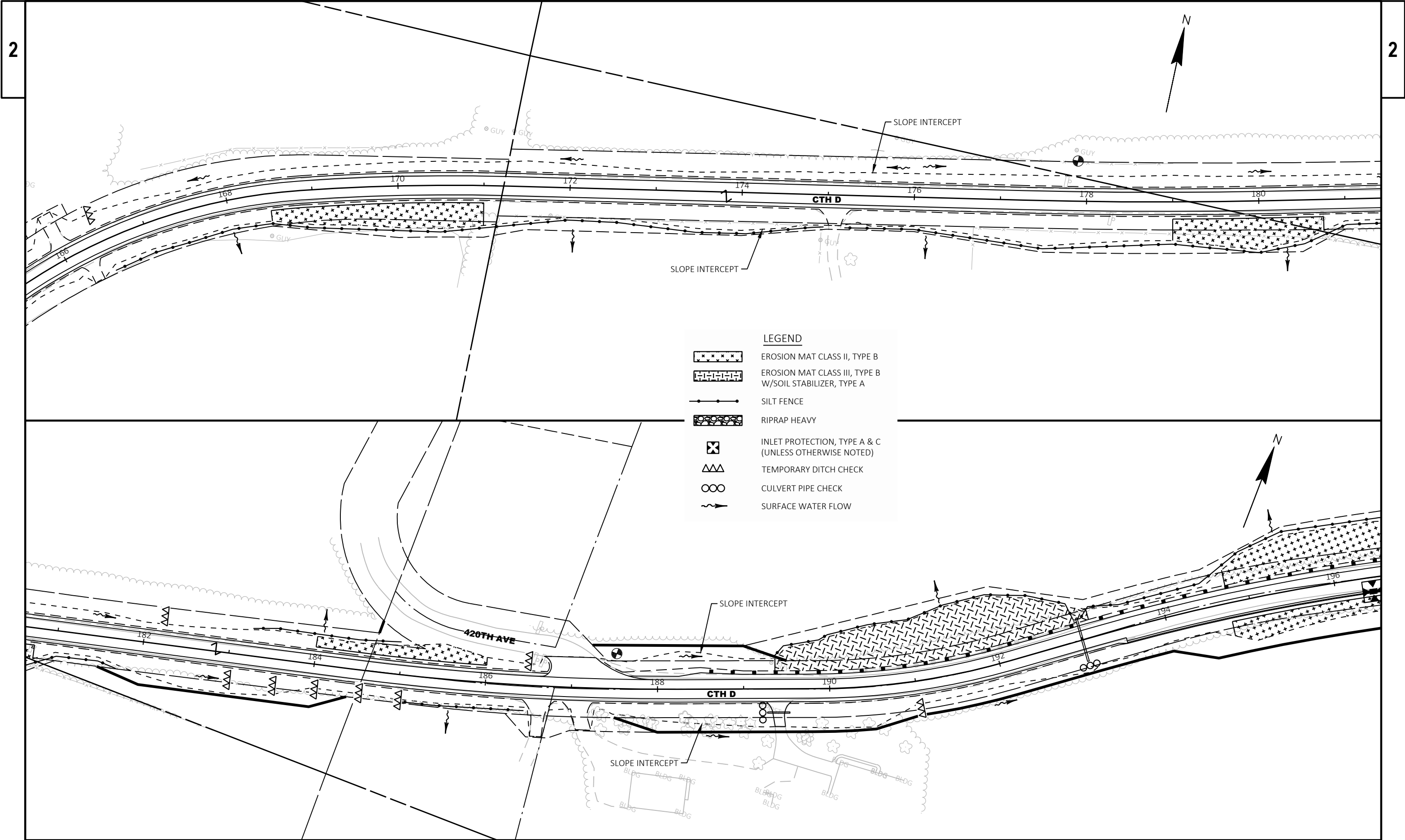


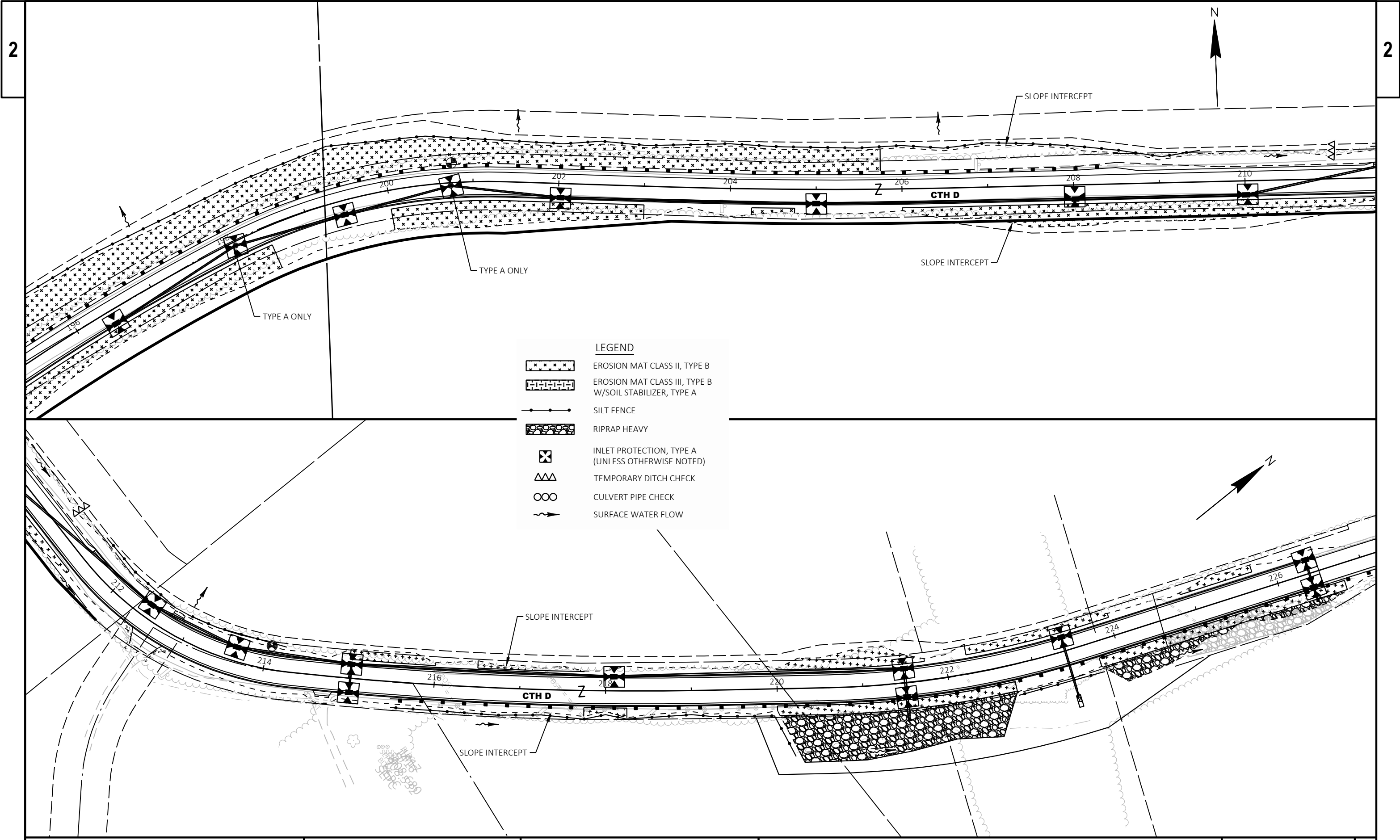


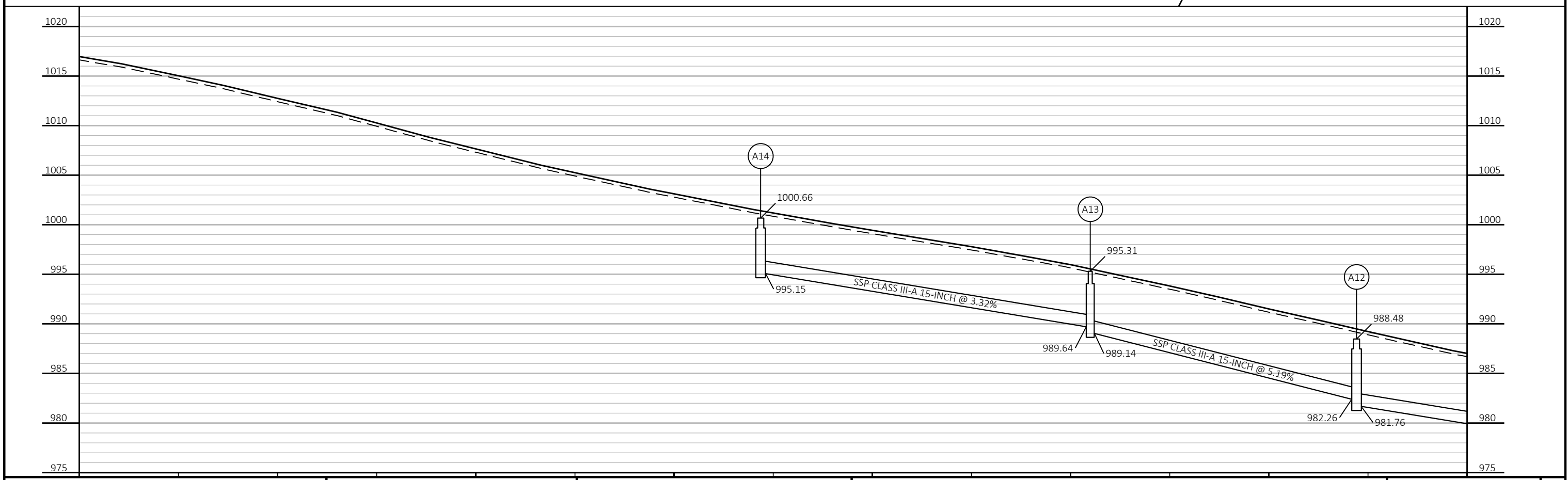
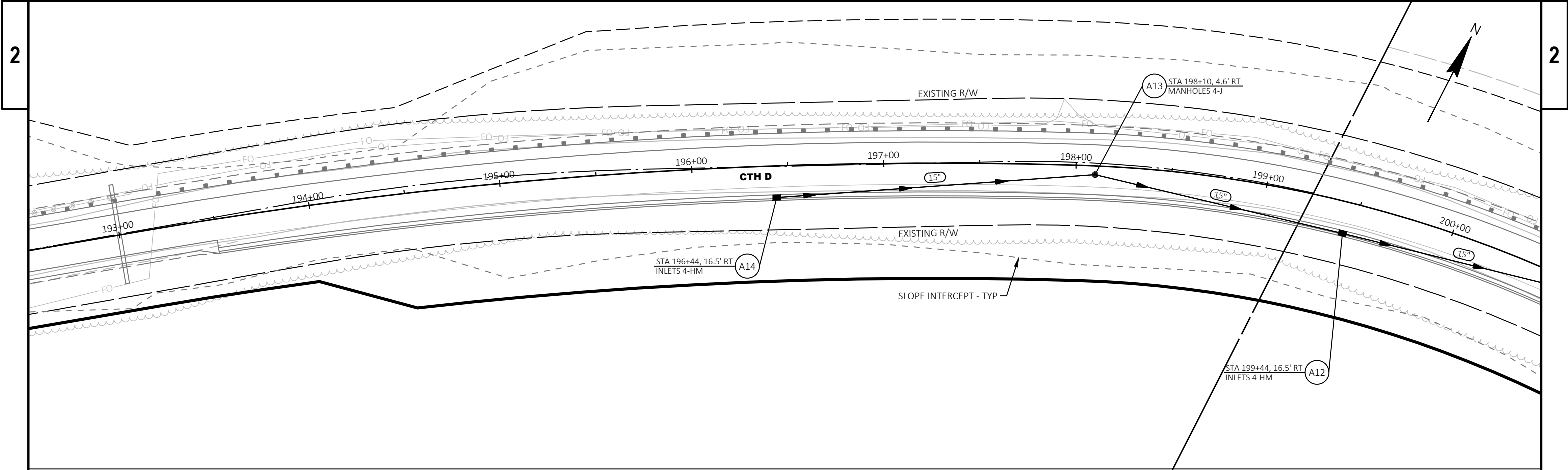
SECTION THRU VANE DRAIN
HALF SCALE

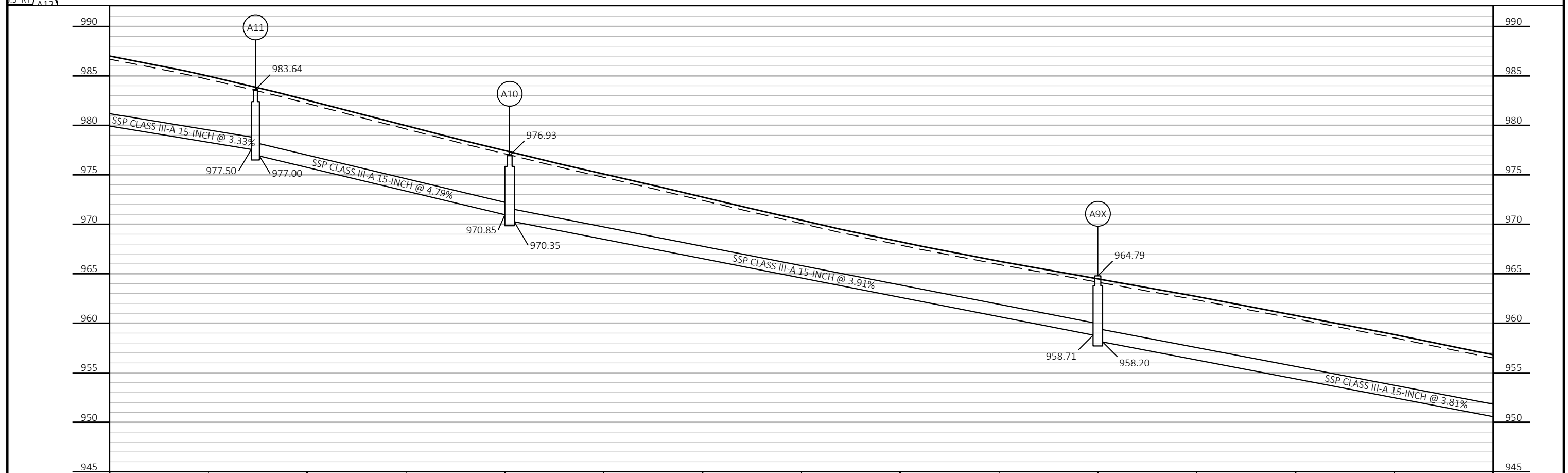
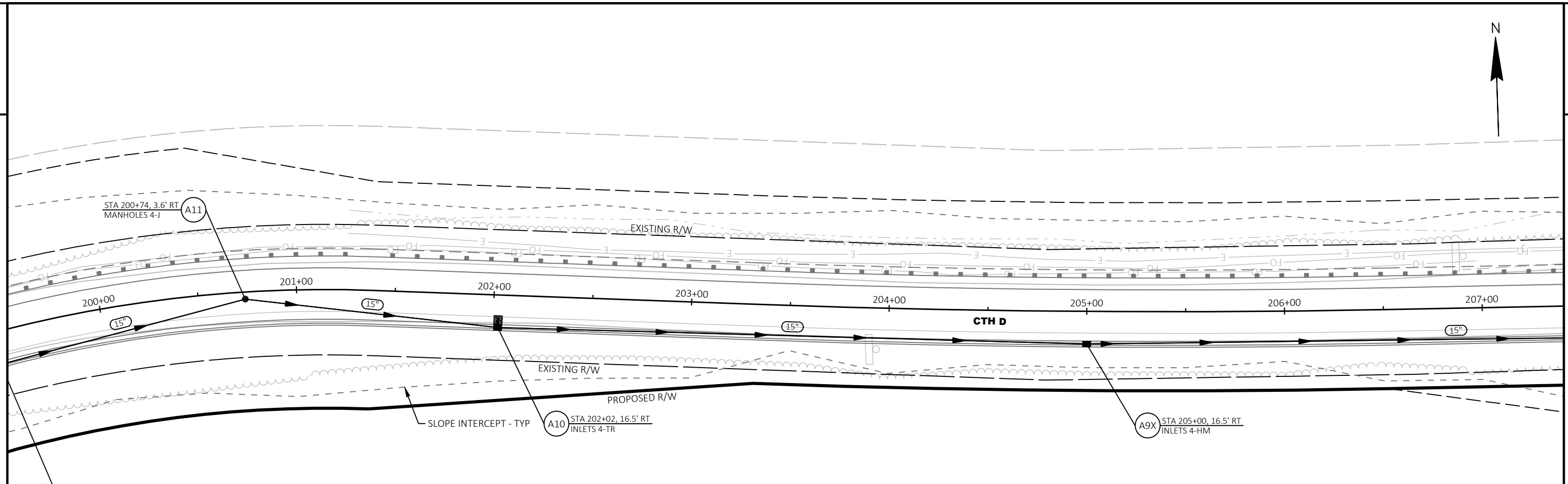


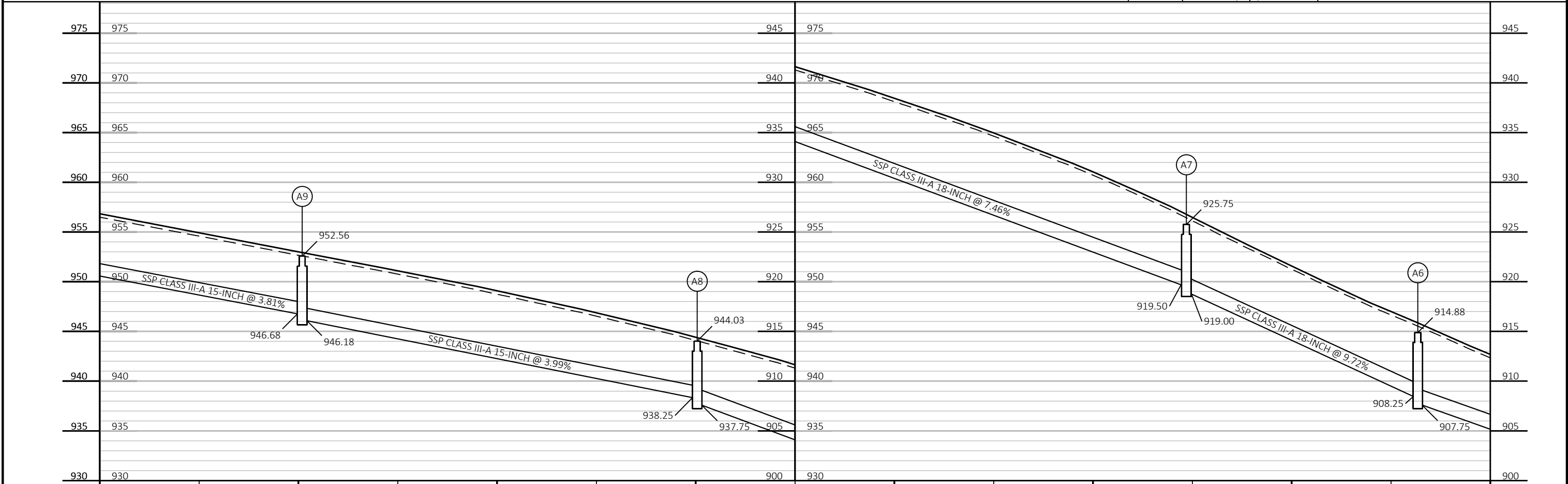
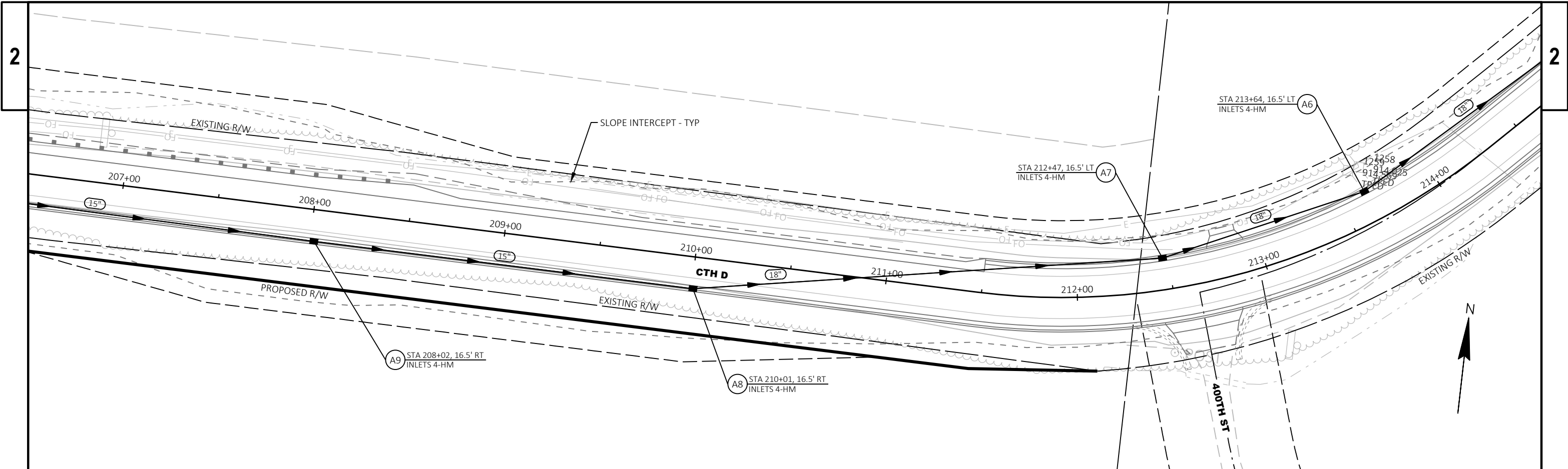




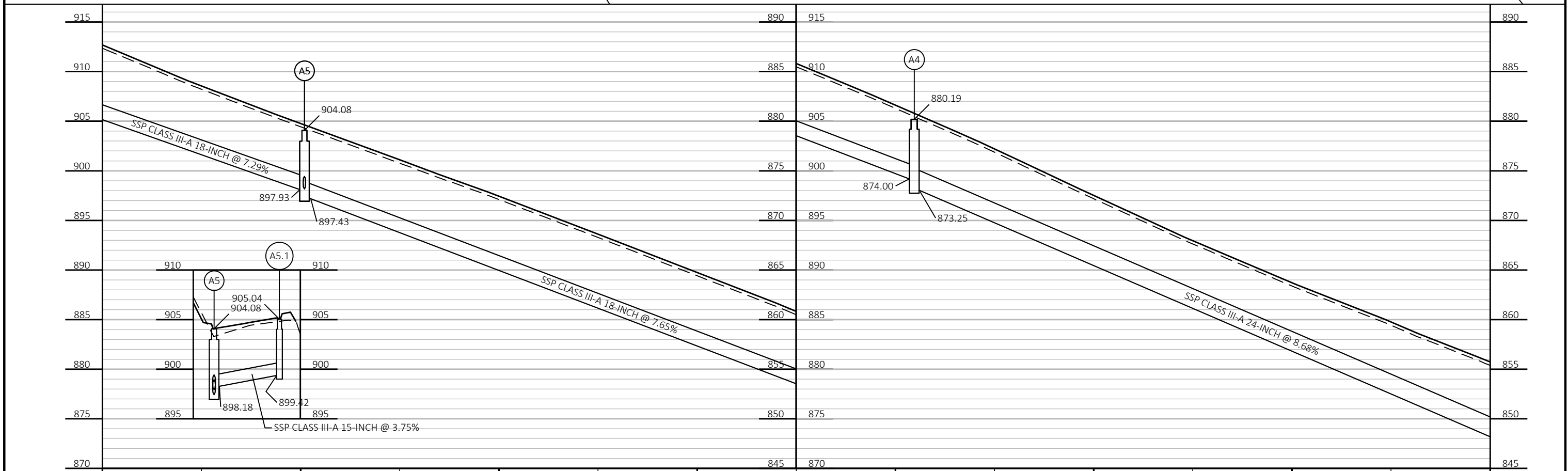
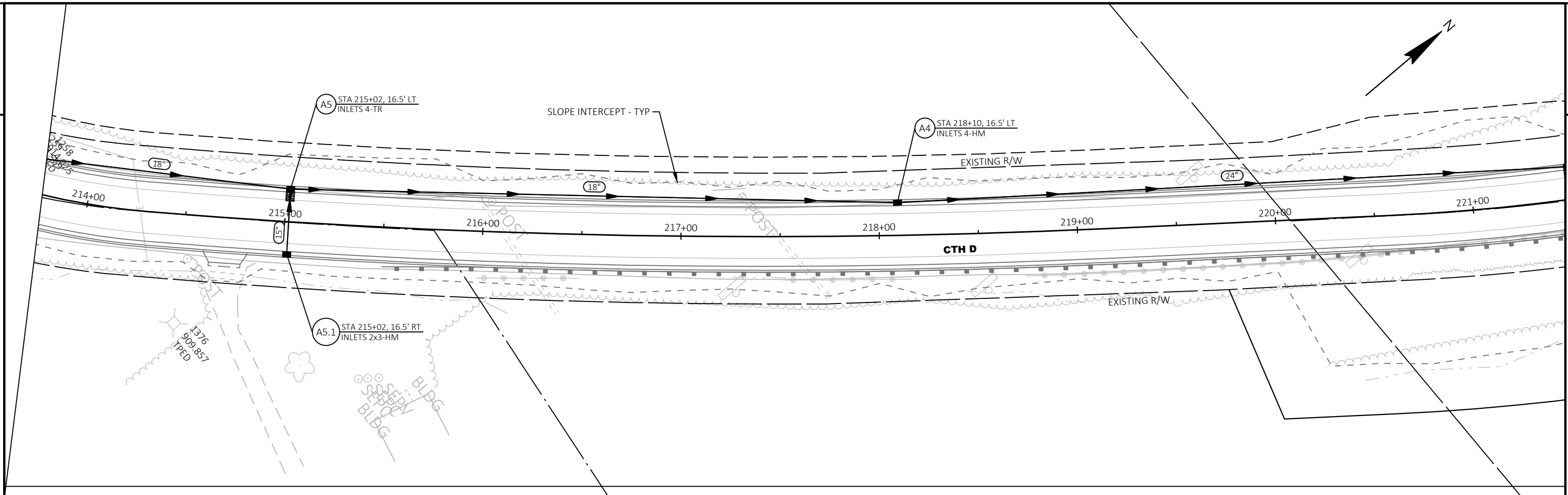


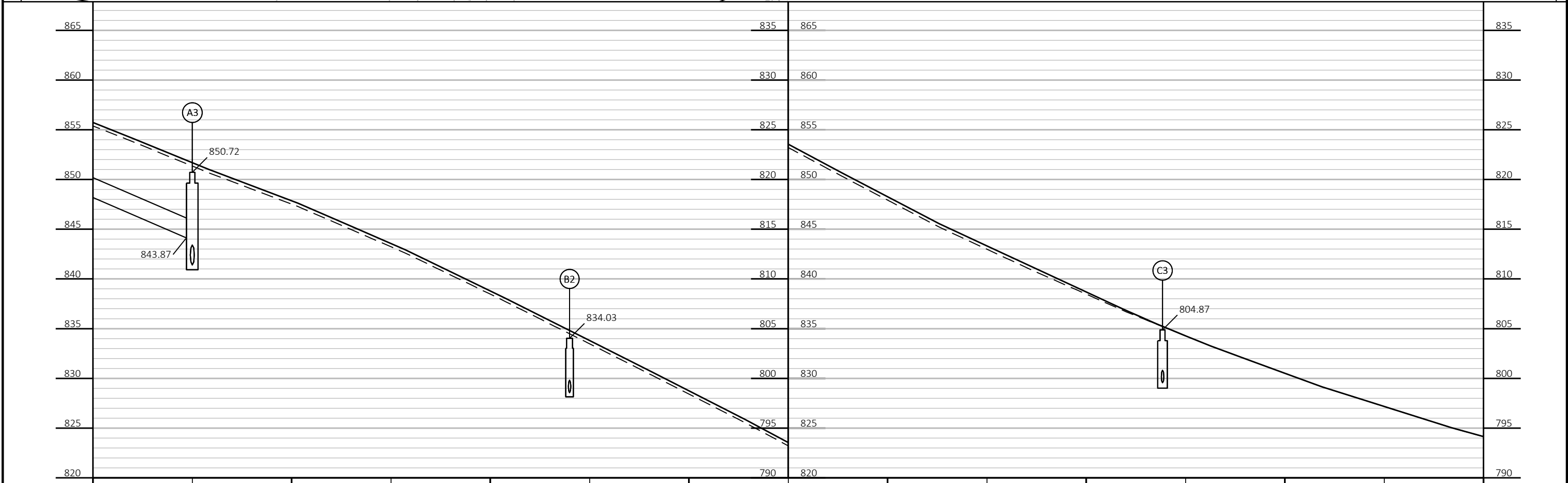
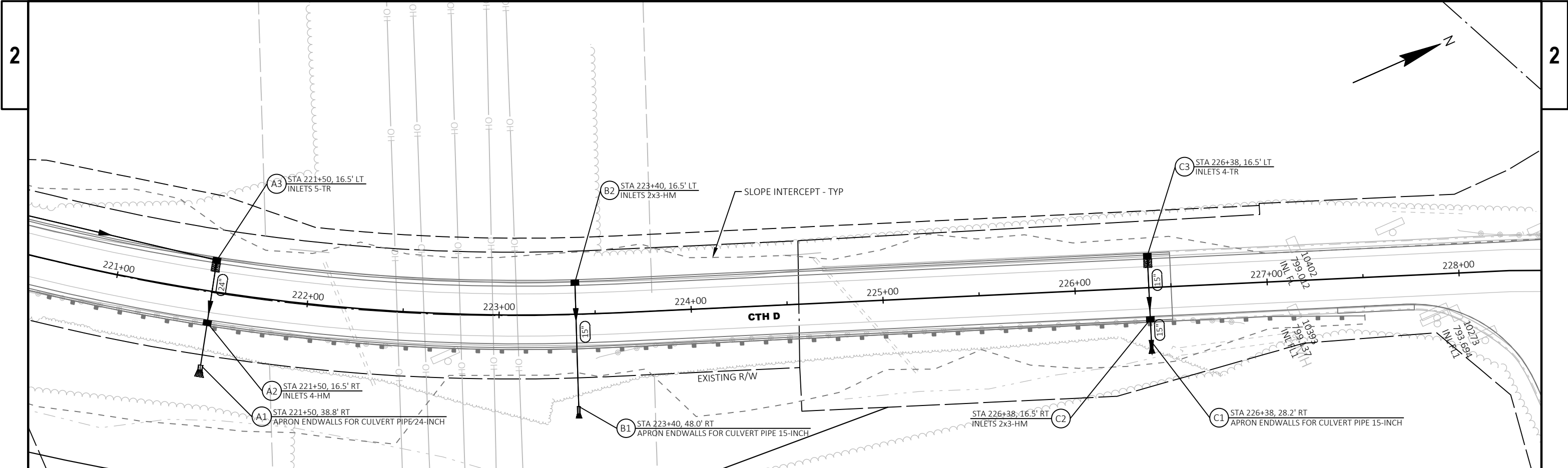


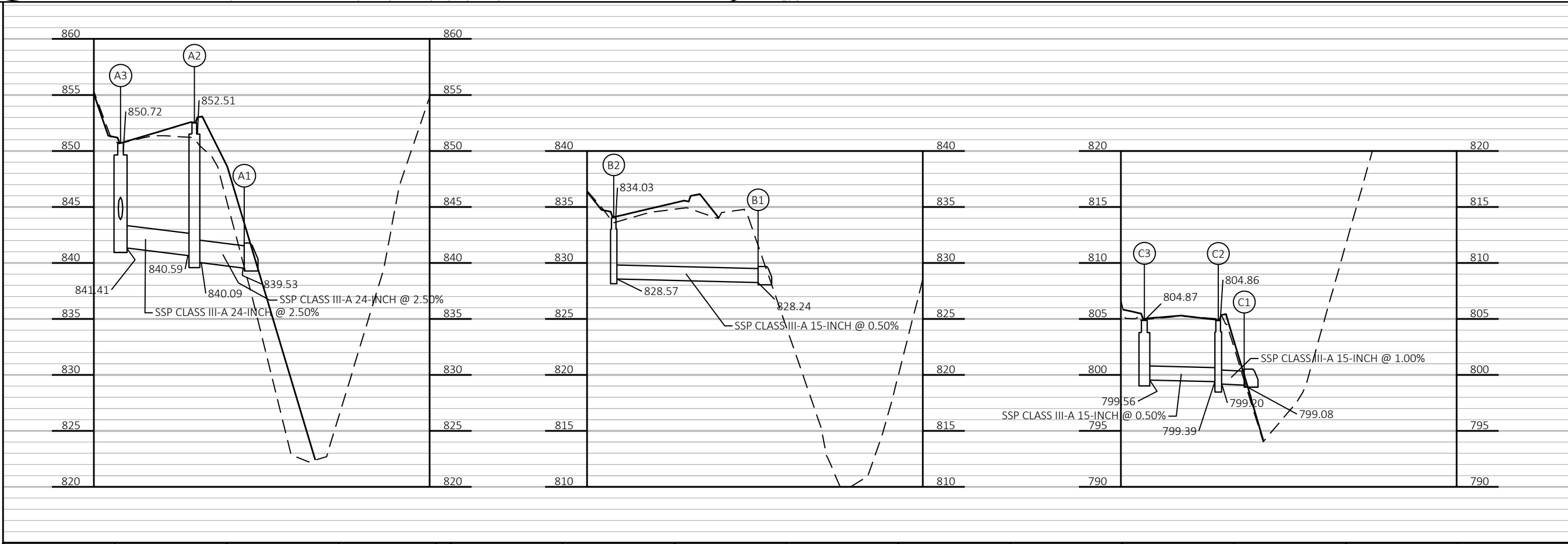
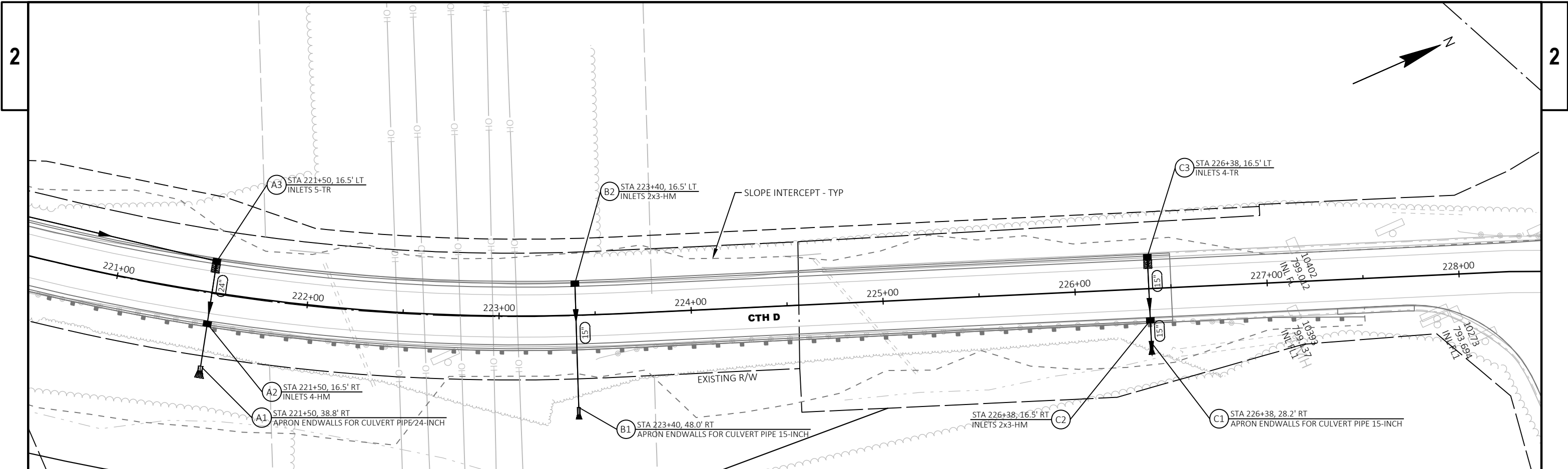




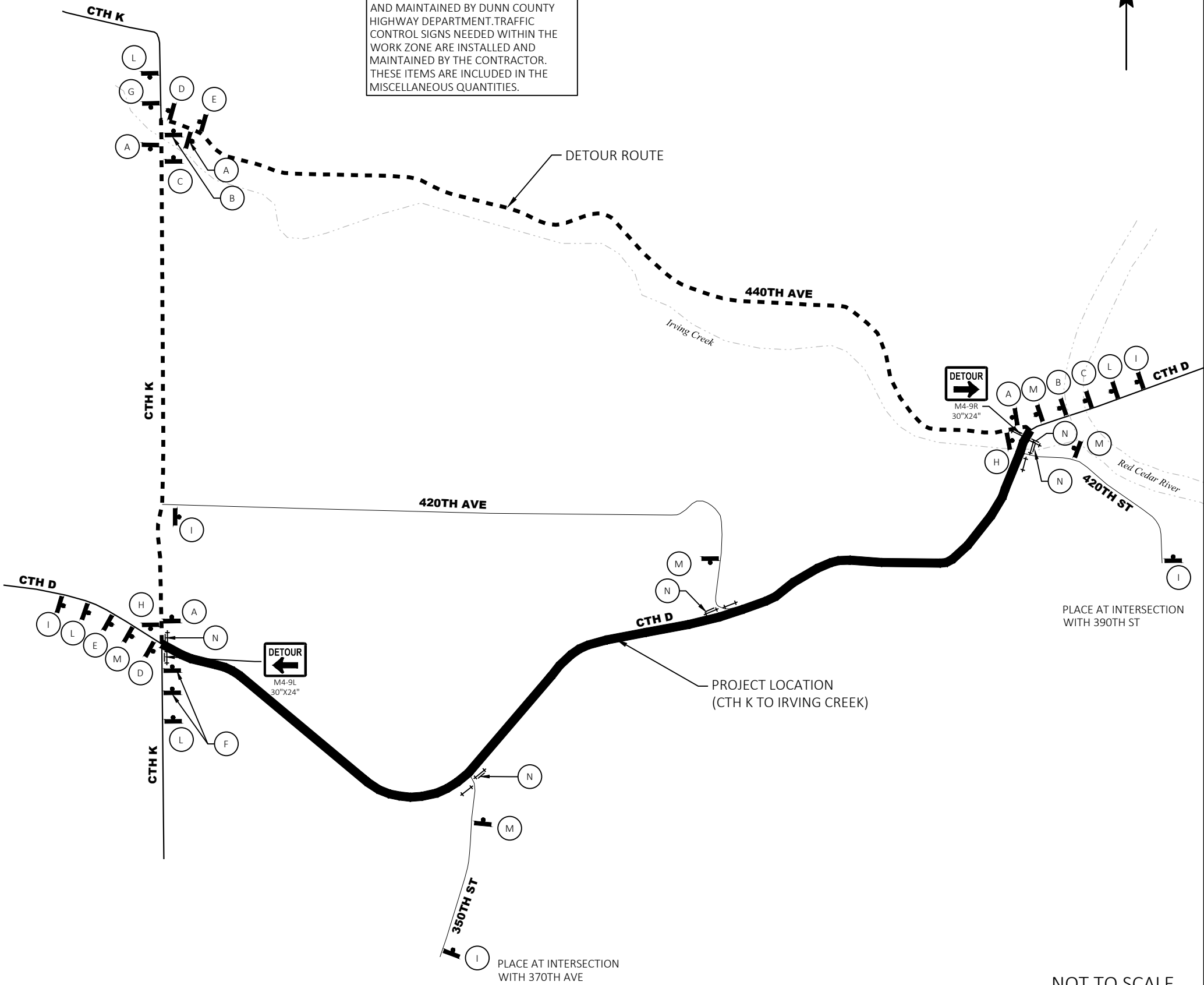
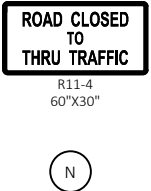
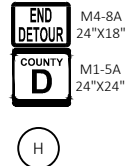
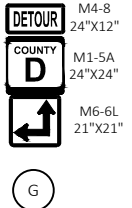
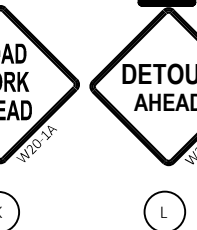
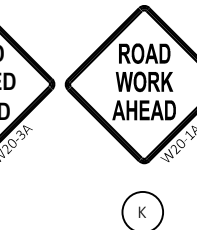
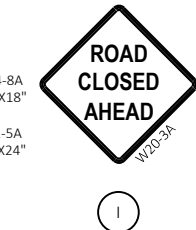
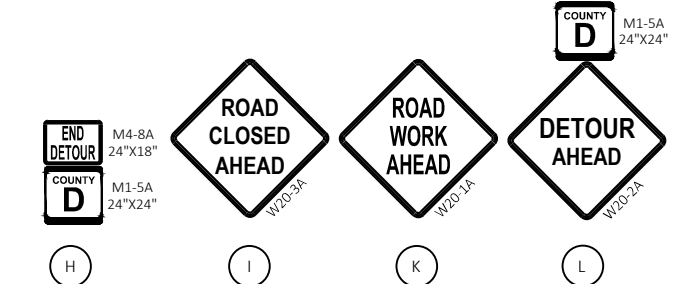
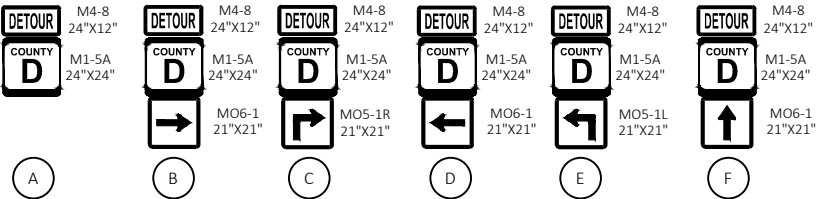
PROJECT NO:	7881-05-73	HWY:	CTH D	COUNTY:	DUNN	STORM SEWER	SHEET	16	E
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NOTE:
DETOUR ROUTE SIGNS TO BE INSTALLED
AND MAINTAINED BY DUNN COUNTY
HIGHWAY DEPARTMENT. TRAFFIC
CONTROL SIGNS NEEDED WITHIN THE
WORK ZONE ARE INSTALLED AND
MAINTAINED BY THE CONTRACTOR.
THESE ITEMS ARE INCLUDED IN THE
MISCELLANEOUS QUANTITIES.



DETOUR NOTES:

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND AS APPROVED BY THE ENGINEER. THERE IS AN UNDISTRIBUTED AMOUNT IN THE QUANTITIES FOR THESE SIGNS.

ALL SIGNS SHALL BE 48"X48" UNLESS NOTED BY THE ENGINEER.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND SHALL BE ORANGE.

FOR DETAILS NOT SHOWN SEE SDD "DETOUR SIGNING FOR MAINLINE CLOSURES", AND "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" FOR ADDITIONAL INFORMATION.

NOT TO SCALE

Estimate Of Quantities

7881-05-73					
Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	46.000	46.000
0004	201.0205	Grubbing	STA	46.000	46.000
0006	203.0100	Removing Small Pipe Culverts	EACH	5.000	5.000
0008	203.0220	Removing Structure (structure) 01. STA 110+70	EACH	1.000	1.000
0010	204.0110	Removing Asphaltic Surface	SY	288.000	288.000
0012	204.0115	Removing Asphaltic Surface Butt Joints	SY	484.000	484.000
0014	204.0120	Removing Asphaltic Surface Milling	SY	2,453.000	2,453.000
0016	204.0150	Removing Curb & Gutter	LF	301.000	301.000
0018	204.0165	Removing Guardrail	LF	1,114.000	1,114.000
0020	204.0170	Removing Fence	LF	1,012.000	1,012.000
0022	205.0100	Excavation Common	CY	7,594.000	7,594.000
0024	205.0200	Excavation Rock	CY	235.000	235.000
0026	208.0100	Borrow	CY	10,289.000	10,289.000
0028	213.0100	Finishing Roadway (project) 01. 7881-05-73	EACH	1.000	1.000
0030	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,719.000	1,719.000
0032	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	5,850.000	5,850.000
0034	325.0100	Pulverize and Relay	SY	29,236.000	29,236.000
0036	455.0605	Tack Coat	GAL	5,050.000	5,050.000
0038	460.6223	HMA Pavement 3 MT 58-28 S	TON	5,171.000	5,171.000
0040	460.6244	HMA Pavement 4 MT 58-34 S	TON	4,243.000	4,243.000
0042	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	33.000	33.000
0044	465.0560	Asphaltic Rumble Strips, Centerline	LF	11,125.000	11,125.000
0046	520.1015	Apron Endwalls for Culvert Pipe 15-Inch	EACH	4.000	4.000
0048	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	2.000	2.000
0050	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	3.000	3.000
0052	520.3315	Culvert Pipe Class III-A 15-Inch	LF	38.000	38.000
0054	520.3318	Culvert Pipe Class III-A 18-Inch	LF	36.000	36.000
0056	520.3324	Culvert Pipe Class III-A 24-Inch	LF	54.000	54.000
0058	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	4,815.000	4,815.000
0060	602.0810	Concrete Driveway 6-Inch	SY	42.000	42.000
0062	606.0300	Riprap Heavy	CY	1,475.000	1,475.000
0064	608.0005	Storm Sewer Rock Excavation	CY	870.000	870.000
0066	608.3015	Storm Sewer Pipe Class III-A 15-Inch	LF	1,498.000	1,498.000
0068	608.3018	Storm Sewer Pipe Class III-A 18-Inch	LF	798.000	798.000
0070	608.3024	Storm Sewer Pipe Class III-A 24-Inch	LF	395.000	395.000
0072	611.0530	Manhole Covers Type J	EACH	2.000	2.000
0074	611.0627	Inlet Covers Type HM	EACH	16.000	16.000
0076	611.2004	Manholes 4-FT Diameter	EACH	2.000	2.000
0078	611.3004	Inlets 4-FT Diameter	EACH	12.000	12.000
0080	611.3230	Inlets 2x3-FT	EACH	3.000	3.000
0082	614.2300	MGS Guardrail 3	LF	1,300.000	1,300.000
0084	614.2330	MGS Guardrail 3 K	LF	1,700.000	1,700.000
0086	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
0088	618.0100	Maintenance and Repair of Haul Roads (project) 01. 7881-05-73	EACH	1.000	1.000
0090	619.1000	Mobilization	EACH	1.000	1.000
0092	624.0100	Water	MGAL	240.000	240.000
0094	625.0500	Salvaged Topsoil	SY	46,030.000	46,030.000
0096	627.0200	Mulching	SY	40,560.000	40,560.000
0098	628.1504	Silt Fence	LF	13,240.000	13,240.000

Estimate Of Quantities

7881-05-73

Line	Item	Item Description	Unit	Total	Qty
0100	628.1520	Silt Fence Maintenance	LF	13,240.000	13,240.000
0102	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0104	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0106	628.2023	Erosion Mat Class II Type B	SY	13,295.000	13,295.000
0108	628.2033	Erosion Mat Class III Type B	SY	2,210.000	2,210.000
0110	628.6505	Soil Stabilizer Type A	ACRE	0.450	0.450
0112	628.7005	Inlet Protection Type A	EACH	22.000	22.000
0114	628.7015	Inlet Protection Type C	EACH	20.000	20.000
0116	628.7504	Temporary Ditch Checks	LF	390.000	390.000
0118	628.7555	Culvert Pipe Checks	EACH	16.000	16.000
0120	628.7570	Rock Bags	EACH	30.000	30.000
0122	629.0210	Fertilizer Type B	CWT	35.000	35.000
0124	630.0120	Seeding Mixture No. 20	LB	1,495.000	1,495.000
0126	630.0200	Seeding Temporary	LB	765.000	765.000
0128	630.0500	Seed Water	MGAL	1,295.000	1,295.000
0130	633.5200	Markers Culvert End	EACH	10.000	10.000
0132	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	8.000	8.000
0134	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	30.000	30.000
0136	637.2210	Signs Type II Reflective H	SF	102.720	102.720
0138	637.2230	Signs Type II Reflective F	SF	182.500	182.500
0140	638.2602	Removing Signs Type II	EACH	36.000	36.000
0142	638.3000	Removing Small Sign Supports	EACH	36.000	36.000
0144	642.5001	Field Office Type B	EACH	1.000	1.000
0146	643.0420	Traffic Control Barricades Type III	DAY	250.000	250.000
0148	643.0705	Traffic Control Warning Lights Type A	DAY	300.000	300.000
0150	643.0900	Traffic Control Signs	DAY	50.000	50.000
0152	643.3165	Temporary Marking Line Paint 6-Inch	LF	48.000	48.000
0154	645.0120	Geotextile Type HR	SY	2,460.000	2,460.000
0156	646.2020	Marking Line Epoxy 6-Inch	LF	46,047.000	46,047.000
0158	650.4000	Construction Staking Storm Sewer	EACH	21.000	21.000
0160	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	4,815.000	4,815.000
0162	650.8000	Construction Staking Resurfacing Reference	LF	12,477.000	12,477.000
0164	650.9911	Construction Staking Supplemental Control (project) 01. 7881-05-73	EACH	1.000	1.000
0166	650.9920	Construction Staking Slope Stakes	LF	11,975.000	11,975.000
0168	690.0150	Sawing Asphalt	LF	156.000	156.000
0170	690.0250	Sawing Concrete	LF	12.000	12.000
0172	740.0440	Incentive IRI Ride	DOL	4,726.000	4,726.000
0174	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	800.000	800.000
0176	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000
0178	SPV.0060	Special 01. Inlet Covers Type TR	EACH	4.000	4.000
0180	SPV.0060	Special 02. Inlets 5-FT Diameter	EACH	1.000	1.000

CLEARING & GRUBBING

				201.0105	201.0205
				CLEARING	GRUBBIN
				STA	STA
STATION	TO	STATION	LOCATION		
110+00	-	111+00	CTH D	1	1
119+00	-	121+00	CTH D	2	2
126+00	-	127+00	CTH D	1	1
136+00	-	138+00	CTH D	2	2
140+00	-	142+00	CTH D	2	2
151+00	-	153+00	CTH D	2	2
170+00	-	172+00	CTH D	2	2
181+00	-	184+00	CTH D	3	3
188+00	-	213+00	CTH D	25	25
214+00	-	222+00	CTH D	5	5
223+00	-	224+00	CTH D	1	1
TOTAL 0010				46	46

REMOVING SMALL PIPE CULVERTS

				203.0100
				REMOVING SMALL
				PIPE CULVERTS
STATION	LOCATION	EACH	SIZE\TYPE	
153+29	CTH D	1	39"x12" CMCP	
216+10	CTH D	1	70"x24" CMCP	
217+49	CTH D	1	70"x24" CMCP	
222+18	CTH D	1	70"x18" CMCP	
224+85	CTH D	1	80"x18" CMCP	
TOTAL 0010				5

REMOVING FENCE

				204.0170
				REMOVING
				FENCE
STATION	TO	STATION	LOCATION	LF
109+47	-	109+89	LT	42
118+00	-	120+00	LT	200
171+14	-	174+93	RT	379
176+69	-	180+60	RT	391
TOTAL 0010				1,012

REMOVING ASPHALTIC SURFACE

			204.0110
			REMOVING
			ASPHALTIC
			SURFACE
STATION	LOCATION	SY	
114+80	DRWY, LT	62	
128+50	DRWY, RT	60	
153+23	DRWY, RT	116	
189+43	DRWY, RT	50	
TOTAL 0010			288

REMOVING STRUCTURE

				203.0220.01
				(STRUCTURE) (01. STA
				110+70)
STATION	LOCATION	EACH	REMARKS	
110+70	CTH D	1	53'x72" CMCP CATTLE PASS	
TOTAL 0010		1		

REMOVING ASPHALTIC SURFACE MILLING

				204.0115	204.0120
				REMOVING	REMOVING
				ASPHALTIC	ASPHALTIC
				SURFACE BUTT	SURFACE
				JOINTS	MILLING
STATION	TO	STATION	LOCATION	SY	SY
104+00	-	106+90	CTH D	91	1,516
			350TH ST	172	--
			420TH AVE	153	--
226+50	-	228+77	CTH D	68	937
TOTAL 0010				484	2,453

REMOVING CURB & GUTTER

				204.0150
				REMOVING CURB
				& GUTTER
				LF
STATION	TO	STATION	LOCATION	
224+70	-	226+50	CTH D, LT	180
225+69	-	226+50	CTH D, RT	81
227+36	-	227+76	CTH D, RT	40
TOTAL 0010				301

REMOVING GUARDRAIL

				204.0165
				REMOVING
				GUARDRAIL
				LF
STATION	TO	STATION	LOCATION	
190+25	-	193+10	CTH D, LT	278
216+00	-	216+50	CTH D, RT	53
217+50	-	218+15	CTH D, RT	65
218+75	-	222+45	CTH D, RT	378
223+50	-	226+87	CTH D, RT	340
TOTAL 0010				1,114

DIVISION	FROM/TO STATION	205.0100 COMMON EXCAVATION (1)		SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	205.0200 ROCK EXCAVATION (7)	EXPANDED ROCK (12)	UNEXPANDED FILL	EXPANDED FILL (13)	MASS ORDINATE +/- (14)	208.0100 BORROW
		CUT (2)	EBS EXCAVATION (3)				FACTOR 1.10		FACTOR 1.30		
DIVISION 1											
CTH D	105+75/226+50	7,594	0	0	7,594	235	259	14,015	17,883	-10,289	10,289
DIVISION 1 SUBTOTAL		7,594	0	0	7,594	235	259	14,015	17,883	-10,289	10,289
GRAND TOTAL		7,594	0	0	7,594	235	259	14,015	17,883	-10,289	10,289
TOTAL COMMON EXC		7,594									

NOTES:

- (1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
- (2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
- (3) EBS EXCAVATION TO BE BACKFILLED WITH SELECT BORROW MATERIAL. NOTE: THIS IS DESIGNERS CHOICE, CAN BE BACKFILLED WITH BORROW, OR CUT AS WELL.
- 5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
- (7) ROCK EXCAVATION ITEM NUMBER 205.0200
- (12) EXPANDED ROCK FACTOR = 1.10
- (13) EXPANDED FILL FACTOR = 1.30
- EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK) * FILL FACTOR
- (14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

FINISHING ROADWAY

213.0100.01	
FINISHING ROADWAY (PROJECT) (01. 7881-05-73)	
LOCATION	EACH
PROJECT LIMITS	1
TOTAL 0010	1

BASE AGGREGATE DENSE

		305.0110		305.0120	
		BASE AGGREGATE		BASE AGGREGATE	
		DENSE 3/4-INCH		DENSE 1 1/4-INCH	
STATION	TO	STATION	LOCATION	TON	TON
105+90	-	193+00	RT	597	2,202
105+90	-	188+50	LT	566	2,088
		114+80	DRWY, LT	--	18
		128+50	DRWY, RT	--	19
		153+23	DRWY, RT	--	36
188+50	-	208+50	LT	137	506
		189+43	DRWY, RT	--	16
208+50	-	211+50	LT	21	38
193+00	-	226+50	RT	--	631
211+50	-	226+50	LT	--	283
		212+63	400TH ST	13	7
			GRAVEL DRWY (18)	345	6
UNDISTRIBUTED				40	--
TOTAL 0010		1,719		5,850	

NOTE: UNDISTRIBUTED FOR MILL AND OVERLAY SECTIONS TO RESORE SHOULDERS.

PULVERIZE AND RELAY

		325.0100	
		PULVERIZE AND	
		RELAY	
STATION	TO	STATION	LOCATION
106+90	-	226+50	CTH D
TOTAL 0010		29,236	

HMA PAVEMENT

		455.0605		460.6223		460.6244		465.0120	
		TACK COAT		HMA PAVEMENT		HMA PAVEMENT		ASPHALTIC SURFACE	
		GAL		3 MT 58-28 S		4 MT 58-34 S		DRIVEWAYS AND	
STATION	TO	STATION	LOCATION	TON	TON	TON	TON	FIELD ENTRANCES	
104+00	-	106+90	CTH D	109	23	158	--		
106+90	-	226+50	CTH D	4,847	5,083	3,954	--		
		114+80	PE, LT	.	--	--	7		
		128+50	PE, RT	--	--	--	7		
			350TH ST	12	22	17	--		
		153+23	PE, RT	--	--	--	13		
			420TH AVE	11	20	15	--		
		189+43	PE, RT	--	--	--	6		
226+50	-	228+77	CTH D	71	23	99	--		
TOTAL 0010		5,050		5,171		4,243		33	

ASPHALTIC RUMBLE STRIPS, CENTERLINE

		465.0560	
		ASPHALTIC	
		RUMBLE STRIPS,	
		CENTERLINE	
STATION	TO	STATION	LOCATION
107+00	-	226+25	CTH D
TOTAL 0010		11,125	

CULVERT PIPE CLASS III-A

		520.1015		520.1018		520.1024		520.3315		520.3318		520.3324	
		APRON		APRON		APRON		CULVERT PIPE		CULVERT PIPE		PIPE CLASS	
		ENDWALLS		ENDWALLS		ENDWALLS		CLASS III-A		CLASS III-A		III-A 24-	
		FOR CULVERT		FOR CULVERT		FOR CULVERT		15-INCH		18-INCH		INCH	
STATION	LOCATION	EACH	EACH	EACH	LF	LF	LF	LF	LF	LF	LF	LF	LF
153+30	PE, LT	2	--	--	38	--	--						
189+43	PE, RT	--	2	--	--	36	--						
193+00	CTH D	--	--	2	--	--	54						
TOTAL 0010		*4		2		*3		38		36		54	

* ADDITIONAL QUANTITIES LOCATED ELSEWHERE

CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

		601.0557		650.5500	
		CONCRETE CURB &		CONSTRUCTION	
		GUTTER 6-INCH		STAKING CURB	
		SLOPED 36-INCH		GUTTER AND CURB	
		TYPE D		& GUTTER	
STATION	TO	STATION	LOCATION	LF	LF
193+50	-	212+50	CTH D, RT	1,900	1,900
211+50	-	226+50	CTH D, LT	1,500	1,500
212+75	-	226+50	CTH D, RT	1,375	1,375
227+36	-	227+76	CTH D, RT	40	40
TOTAL 0010		4,815		4,815	

CONCRETE DRIVEWAY 6-INCH

		602.0810	
		CONCRETE	
		DRIVEWAY 6-INCH	
STATION	LOCATION	SY	
212+63	400TH ST	22	
212+81	FE, LT	9	
214+71	PE, RT	11	
TOTAL 0010		42	

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

STORM SEWER STRUCTURES																
				520.1015	520.1024	611.0530	611.0627	SPV.0060.01	611.2004	611.3004	SPV.0060.02	611.3230	650.4000			
				APRON ENDWALLS FOR	APRON ENDWALLS FOR	MANHOLE COVERS	INLET COVERS	INLET COVERS	4-FT	INLETS 4-FT	INLETS 5-FT	INLETS	CONSTRUCTION	(2)	(3)	(4)
STRUCTURE	STATION	(1)	LOCATION	CULVERT PIPE 15-INCH	CULVERT PIPE 24-INCH	TYPE J	TYPE HM	TYPE TR	DIAMETER	DIAMETER	DIAMETER	2X3-FT	STAKING STORM SEWER	RIM	INVERT	DEPTH
				EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	ELEVATION	ELEVATION	FT
A1	221+50	38.8' RT	CTH D	-	1	-	-	-	-	-	-	-	1	-	839.53	-
A2	221+50	16.5' RT	CTH D	-	-	-	1	-	-	1	-	-	1	852.51	840.09	11.67
A3	221+50	16.5' LT	CTH D	-	-	-	1	1	-	-	1	-	1	850.72	841.41	8.56
A4	218+10	16.5' LT	CTH D	-	-	-	1	-	-	1	-	-	1	880.19	873.25	6.19
A5	215+02	16.5' LT	CTH D	-	-	-	1	1	-	1	-	-	1	904.08	897.43	5.90
A5.1	215+02	16.5' RT	CTH D	-	-	-	1	-	-	-	-	1	1	905.10	899.42	4.93
A6	213+64	16.5' LT	CTH D	-	-	-	1	-	-	1	-	-	1	914.88	907.75	6.38
A7	212+47	16.5' LT	CTH D	-	-	-	1	-	-	1	-	-	1	925.75	919.00	6.00
A8	210+01	16.5' RT	CTH D	-	-	-	1	-	-	1	-	-	1	944.03	937.75	5.53
A9	208+02	16.5' RT	CTH D	-	-	-	1	-	-	1	-	-	1	952.56	946.18	5.63
A9X	205+00	16.5' RT	CTH D	-	-	-	1	-	-	1	-	-	1	964.79	958.21	5.83
A10	202+02	16.5' RT	CTH D	-	-	-	1	1	-	1	-	-	1	976.93	970.35	5.83
A11	200+74	3.6' RT	CTH D	-	-	1	-	-	1	-	-	-	1	983.64	977.00	5.89
A12	199+44	16.5' RT	CTH D	-	-	-	1	-	-	1	-	-	1	988.48	981.76	5.97
A13	198+10	4.6' RT	CTH D	-	-	1	-	-	1	-	-	-	1	995.31	989.14	5.42
A14	196+44	16.5' RT	CTH D	-	-	-	1	-	-	1	-	-	1	1000.66	995.15	4.76
B1	223+40	48.0' RT	CTH D	1	-	-	-	-	-	-	-	-	1	-	828.24	-
B2	223+40	16.5' LT	CTH D	-	-	-	1	-	-	-	-	1	1	834.10	828.57	4.78
C1	226+38	28.2' RT	CTH D	1	-	-	-	-	-	-	-	-	1	-	799.08	-
C2	226+38	16.5' RT	CTH D	-	-	-	1	-	-	-	-	1	1	804.86	798.89	5.22
C3	226+38	16.5' LT	CTH D	-	-	-	1	1	-	1	-	-	1	804.99	799.56	4.68
TOTAL 0010				*4	*3	2	16	4	2	12	1	3	21			

NOTES:
(1) STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
(2) RIM ELEV IS AT THE INLET COVER FLOWLINE LOCATION
(3) FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP . FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
(4) DEPTH = RIM ELEV - INVERT ELEV - COVER HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT
* ADDITIONAL QUANTITIES LOCATED ELSEWHERE

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

STORM SEWER PIPES

				608.3015	608.3018	608.3024	JOINT TIES** EACH	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT
FROM	-	TO	LOCATION	STORM SEWER PIPE CLASS III-A 15-INCH LF	STORM SEWER PIPE CLASS III-A 18-INCH LF	STORM SEWER PIPE CLASS III-A 24-INCH LF				
A2	-	A1	CTH D	-	-	22	3	840.09	839.53	0.0250
A3	-	A2	CTH D	-	-	33	3	841.41	840.59	0.0250
A4	-	A3	CTH D	-	-	340	3	873.25	843.87	0.0868
A5	-	A4	CTH D	-	307	-	3	897.43	874.00	0.0765
A5.1	-	A5	CTH D	33	-	-	3	899.42	898.18	0.0375
A6	-	A5	CTH D	-	135	-	3	907.75	897.93	0.0729
A7	-	A6	CTH D	-	111	-	3	919.00	908.25	0.0972
A8	-	A7	CTH D	-	245	-	3	937.75	919.50	0.0746
A9	-	A8	CTH D	199	-	-	3	946.18	938.25	0.0399
A9X	-	A9	CTH D	303	-	-	3	958.20	946.68	0.0381
A10	-	A9X	CTH D	298	-	-	3	970.35	958.71	0.0391
A11	-	A10	CTH D	129	-	-	3	977.00	970.85	0.0479
A12	-	A11	CTH D	128	-	-	3	981.76	977.50	0.0333
A13	-	A12	CTH D	133	-	-	3	989.14	982.26	0.0519
A14	-	A13	CTH D	166	-	-	3	995.15	989.64	0.0332
B2	-	B1	CTH D	64	-	-	3	828.57	828.24	0.0050
C2	-	C1	CTH D	12	-	-	3	799.20	799.08	0.0100
C3	-	C2	CTH D	33	-	-	3	799.56	799.39	0.0049
TOTAL 0010				1498	798	395				

**NON-BID ITEM: FOR INFORMATION ONLY

STORM SEWER ROCK EXCAVATION

				608.0005
				STORM SEWER ROCK EXCAVATION CY
FROM	-	TO	LOCATION	
196+40		226+40	STORM SEWER	870
TOTAL 0010				870

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

3

3

SIGNING TYPE II & REMOVING SIGNS TYPE II ~ CONTINUED ~

APPROX. STATION	EXISTING STATION	LOCATION	SIGN CODE	SIGN SIZE WxH (INCHES)	634.0614	634.0616	637.2210	637.2230	638.2602	638.3000	REMARKS
					POSTS WOOD 4X6-INCH X 14-FT EACH	POSTS WOOD 4X6-INCH X 16-FT EACH	SIGNS TYPE II REFLECTIVE H SF	SIGNS TYPE II REFLECTIVE F SF	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	
218+53	219+62	RT	W3-5	36x36	--	1	--	9.00	1	1	"35"
218+53		LT	W1-2R	36x36	--	1	--	9.00	1	1	
			W13-1	18x18	--	--	--	2.25	--	--	"35" (SHARES POST)
220+42		RT	MR2-1	21x15	--	1	2.20	--	1	1	
			MR1-99	24x24	--	--	4.00	--	--	--	(SHARES POST)
			MR4-53	24x12	--	--	2.00	--	--	--	"R 89" (SHARES POST)
222+73		RT	W1-1R	36x36	--	1	--	9.00	1	1	
			W13-1	18x18	--	--	--	2.25	--	--	"20" (SHARES POST)
227+68		LT	R2-1	24x30	--	1	5.00	--	1	1	"55"
227+86		RT	R2-1	24x30	1	--	5.00	--	1	1	"35"
227+86		RT	MR1-99	24x24	1	--	4.00	--	1	1	
			MR6-6R	21x21	--	--	3.06	--	--	--	(SHARES POST)
228+43		LT	MR1-99	24x24	--	1	4.00	--	1	1	
			MR6-1L	21x21	--	--	3.06	--	--	--	(SHARES POST)
228+68		LT	W5-52L	12x36	--	1	--	3.00	1	1	
228+72		RT			--	--	--	--	1	1	
228+86		RT	W5-52R	12x36	--	1	--	3.00	1	1	
228+68		RT (420TH ST)	R1-1	30x30	--	1	5.18	--	1	1	
TOTAL 0010					8	30	102.72	182.50	36	36	

MOBILIZATION EROSION CONTROL

LOCATION	628.1905	628.1910
	MOBILIZATIONS EROSION CONTROL EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
PROJECT LIMITS	6	4
TOTAL 0010	6	4

TRAFFIC CONTROL

LOCATION	DAYS	643.0420	643.0705	643.0900
		TRAFFIC CONTROL BARRICADES TYPE III DAY	TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	TRAFFIC CONTROL SIGNS DAY
STORM SEWER INSTALLATION UNDISTRIBUTED	20	200 50	240 60	40 10
TOTAL 0010		250	300	50

NOTE: DETOUR INSTALLED AND MAINTAINED BY DUNN COUNTY.

MARKING LINE ITEMS

STATION	TO	STATION	LOCATION	DESCRIPTION	COLOR	643.3165	646.2020
						TEMPORARY MARKING LINE PAINT 6-INCH LF	MARKING LINE EPOXY 6-INCH LF
105+88	-	227+72	CTH D	RT EDGELINE	WHITE	--	12,184
105+50	-	228+68	CTH D	LT EDGELINE	WHITE	--	12,318
104+00	-	228+77	CTH D	CENTERLINE	YELLOW	--	21,436
			CTH K	CENTERLINE/EDGELINE	YELLOW/WHITE	48	109
TOTAL 0010						48	46,047

SAWING

STATION	LOCATION	690.0150	690.0250
		SAWING ASPHALT LF	SAWING CONCRETE LF
114+80	PE, LT	11	--
128+50	PE, RT	14	--
147+68	350TH ST	24	--
153+23	PE, RT	35	--
187+09	420TH AVE	60	--
189+43	PE, RT	12	--
226+50	LT/RT CURB	--	6
227+36	RT	--	3
227+76	RT	--	3
TOTAL 0010		156	12

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

MGS GUARDRAIL ITEMS

STATION	TO	STATION	LOCATION	614.2300	614.2330	614.2610
				MGS GUARDRAIL 3 LF	MGS GUARDRAIL 3 K LF	MGS GUARDRAIL TERMINAL EAT EACH
188+50	-	208+50	CTH D, LT	850	1,050	2
215+50	-	227+50	CTH D, RT	450	650	2
TOTAL 0010				1,300	1,700	4

MAINTENANCE AND REPAIR OF HAUL ROADS

618.0100.01	
MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) (01. 7881-05-73)	
LOCATION	EACH
PROJECT LIMITS	1
TOTAL 0020	1

MOBILIZATION

619.1000	
MOBILIZATION	
LOCATION	EACH
PROJECT LIMITS	1
TOTAL 0010	1

SILT FENCE

STATION	TO	STATION	LOCATION	628.1504	628.1520
				SILT FENCE LF	SILT FENCE MAINTENANCE LF
104+75	-	114+00	LT	940	940
105+75	-	117+00	RT	1,102	1,102
117+50	-	120+75	LT	325	325
119+25	-	123+00	RT	335	335
124+00	-	126+25	LT	178	178
128+25	-	143+00	LT	1,434	1,434
128+75	-	131+25	RT	267	267
141+00	-	143+00	RT	212	212
147+25	-	148+75	LT	157	157
148+25	-	152+50	RT	443	443
153+50		156+00	rt	265	265
161+75	-	163+75	LT	200	200
166+50	-	181+75	RT	1,496	1,496
183+25	-	186+50	LT	173	173
185+00	-	186+50	RT	146	146
189+25	-	209+50	LT	2,082	2,082
211+50	-	214+00	LT	235	235
215+50	-	220+25	RT	502	502
222+75		223+75	RT	100	100
UNDISTRIBUTED				2,648	2,648
TOTAL 0010				13,240	13,240

WATER

624.0100	
WATER	
LOCATION	MGAL
BASE COMPACTION	140
DUST CONTROL	100
TOTAL 0010	240

INLET PROTECTION

STATION	LOCATION	628.7005	628.7015
		INLET PROTECTION TYPE A EACH	INLET PROTECTION TYPE C EACH
221+50.00	RT	1	1
221+50.00	LT	1	1
218+09.51	LT	1	1
215+01.92	LT	1	1
215+01.25	RT	1	1
213+63.54	LT	1	1
212+47.00	LT	1	1
210+00.77	RT	1	1
208+01.97	RT	1	1
205+00.00	RT	1	1
202+02.39	RT	1	1
200+73.83	RT	1	--
199+44.27	RT	1	1
198+09.97	RT	1	--
196+43.72	RT	1	1
223+39.18	LT	1	1
226+38.42	RT	1	1
226+37.01	LT	1	1
UNDISTRIBUTED		4	4
TOTAL 0010		22	20

TEMPORARY DITCH CHECKS, CULVERT PIPE CHECKS & ROCK BAGS

STATION	LOCATION	628.7504	628.7555	628.7570
		TEMPORARY DITCH CHECKS LF	CULVERT PIPE CHECKS EACH	ROCK BAGS EACH
104+00	RT	12	--	--
	LT, CTH K	12	--	--
	RT, CTH K	12	--	--
117+00	RT	12	--	--
117+50	LT	12	--	--
120+75	LT	12	--	--
122+55	LT	--	1	--
123+00	RT	12	--	--
126+25	LT	12	--	--
130+50	RT	12	--	--
143+00	LT/RT	24	--	--
147+25	LT	12	--	--
147+68	RT	--	2	--
148+95	LT	--	3	--
149+28	LT	--	1	--
153+29	LT	--	1	--
156+75	RT	12	--	--
163+75	LT	12	--	--
166+50	LT	12	--	--
183+00	RT	16	--	--
183+25	LT	12	--	--
183+50	RT	16	--	--
184+00	RT	12	--	--
184+50	RT	12	--	--
185+00	RT	12	--	--
186+50	LT	12	--	--
189+43	RT	--	2	--
191+00	RT	14	--	--
193+00	RT	--	3	--
211+00	LT	12	--	--
211+50	LT	12	--	--
UNDISTRIBUTED		80	3	30
TOTAL 0010		390	16	30

EROSION MAT

STATION	TO	STATION	LOCATION	628.2023	628.2033	628.6505
				EROSION MAT CLASS II TYPE B SY	EROSION MAT CLASS III TYPE B SY	SOIL STABILIZER TYPE A ACRE
113+75	-	115+75	RT	558	--	--
148+75	-	149+25	RT/LT	248	--	--
168+50	-	171+00	RT	673	--	--
179+00	-	180+75	RT	582	--	--
184+00	-	186+00	LT	315	--	--
189+50	-	193+25	LT	--	1,767	0.36
194+75	-	198+25	RT	942	--	--
194+75	-	205+75	LT	4,016	--	--
200+00	-	203+00	RT	798	--	--
204+25	-	204+75	RT	35	--	--
206+00	-	211+50	RT	1,114	--	--
215+00	-	216+00	LT	129	--	--
216+50	-	217+75	LT	64	--	--
217+75	-	218+25	RT	42	--	--
220+00	-	222+75	RT	350	--	--
220+00	-	221+75	LT	284	--	--
222+25	-	224+00	LT	161	--	--
223+75	-	224+75	RT	125	--	--
224+85	-	225+75	LT	75	--	--
225+75	-	226+75	RT	124	--	--
UNDISTRIBUTED				2,660	443	0.09
TOTAL 0010				13,295	2,210	0.45

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

SALVAGED TOPSOIL, MULCHING, FERTILIZER, SEEDING & WATER

				625.0500	627.0200	629.0210	630.0120	630.0200	630.0500
				SALVAGED TOPSOIL	MULCHING	FERTILIZER	SEEDING MIXTURE	SEEDING	
STATION	TO	STATION	LOCATION	SY	SY	TYPE B CWT	NO. 20 LB	TEMPORARY LB	SEED WATER MGAL
104+00	-	228+77	CTH D	46,030	32,448	28	1,195	610	1,034
UNDISTRIBUTED				--	8,112	7	300	155	261
TOTAL 0010				46,030	40,560	35	1,495	765	1,295

SIGNING TYPE II & REMOVING SIGNS TYPE II

APPROX. STATION	EXISTING STATION	LOCATION	SIGN CODE	SIGN SIZE WxH (INCHES)	634.0614	634.0616	637.2210	637.2230	638.2602	638.3000	REMARKS
					POSTS WOOD 4X6-INCH X 14-FT EACH	POSTS WOOD 4X6-INCH X 16- FT EACH	SIGNS TYPE II REFLECTIVE H SF	SIGNS TYPE II REFLECTIVE F SF	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	
104+40		LT (CTH K)	J13-1	24x45	--	1	7.50	--	1	1	D: BOTH ARROW
104+40		LT (CTH K)	R1-1	30x30	--	1	5.18	--	1	1	
104+60		RT	J13-1	24x45	--	1	7.50	--	1	1	K: BOTH ARROW
105+33		RT (CTH K)	M1-5A	24x24	1	--	4.00	--	1	1	K
105+47		LT	J13-1	24x45	--	1	7.50	--	1	1	K: BOTH ARROW
105+75		RT (CTH K)	R1-1	30x30	--	1	5.18	--	1	1	
105+75		RT (CTH K)	J13-1	24x45	--	1	7.50	--	1	1	D: BOTH ARROW
106+61		RT	M1-5A	24x24	1	--	4.00	--	1	1	D
110+90		RT	W1-2R	36x36	--	1	--	9	--	--	
114+00	117+34	LT	J1-1	24x39	--	1	6.50	--	1	1	JCT, K
116+75		LT	W1-2L	36x36	--	1	--	9	--	--	
	123+37	LT			--	--	--	--	1	1	
	125+00	RT			--	--	--	--	1	1	
133+15		RT	W1-2L	36x36	--	1	--	9.00	--	--	
142+00		RT	W2-2R	30x30	--	1	--	6.25	1	1	
147+94		RT (350TH ST)	R1-1	30x30	--	1	5.18	--	1	1	
149+73	155+22	LT	W1-2R	36x36	--	1	--	9.00	1	1	
162+00	156+95	RT	W1-2R	36x36	--	1	--	9.00	1	1	
			W13-1	18x18	--	--	--	2.25	--	--	"45" (SHARES POST)
172+00	177+82	LT	W1-2L	36x36	--	1	--	9.00	1	1	
			W13-1	18x18	--	--	--	2.25	--	--	"45" (SHARES POST)
	178+30	RT			--	--	--	--	1	1	
180+74		RT	W7-1	30x30	1	--	--	6.25	1	1	
186+67		LT (420TH AVE)	R1-1	30x30	--	1	5.18	--	1	1	
188+85		RT	W1-2L	36x36	--	1	--	9.00	--	--	
193+30		LT	W1-2R	36x36	--	1	--	9.00	1	1	
195+00		RT	W1-2R	36x36	--	1	--	9.00	--	--	
			W13-1	18x18	--	--	--	2.25	--	--	"45" (SHARES POST)
204+40		LT	W1-2L	36x36	--	1	--	9.00	--	--	
			W13-1	18x18	--	--	--	2.25	--	--	"45" (SHARES POST)
	206+92	LT			--	--	--	--	1	1	
207+00	203+95	RT	W1-2L	36x36	--	1	--	9.00	1	1	
			W13-1	18x18	--	--	--	2.25	--	--	"35" (SHARES POST)
212+40		RT	W1-6	48x24	1	--	--	8.00	--	--	RIGHT ARROW
212+88	213+01	RT	W1-6	48x24	1	--	--	8.00	1	1	LEFT ARROW
217+26		RT	W2-2R	30x30	1	--	--	6.25	1	1	

~ CONTINUE ~

MARKERS CULVERT END

STATION	LOCATION	633.5200
		MARKERS CULVERT END EACH
148+95	CTH D	2
196+44	CTH D, LT	1
199+44	CTH D, LT	1
202+03	CTH D, LT	1
208+03	CTH D, LT	1
218+11	CTH D, RT	1
221+48	CTH D, RT	1
223+39	CTH D, RT	1
226+37	CTH D, RT	1
TOTAL 0010		10

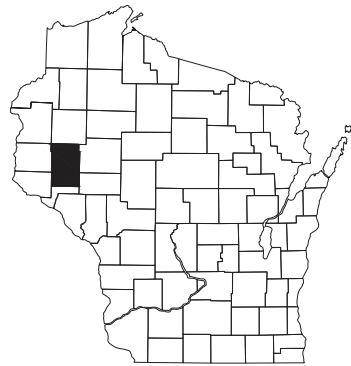
FIELD OFFICE TYPE B

LOCATION	642.5001
	FIELD OFFICE TYPE B EACH
7881-05-73	1
TOTAL 0010	1

RIPRAP HEAVY & GEOTEXTILE TYPE HR

STATION	TO	STATION	LOCATION	606.0300	645.0120
				RIPRAP HEAVY CY	GEOTEXTILE TYPE HR SY
220+00	-	222+75	RT	946	1,559
		223+40	RT	5	16
223+75	-	226+50	RT	230	393
UNDISTRIBUTED				294	492
TOTAL 0010				1,475	2,460

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED



DUNN COUNTY

HIGHWAY DEPARTMENT

TRANSPORTATION PROJECT PLAT TITLE SHEET

7881-05-23

SCL - STH 25

CTH K TO 420TH STREET

CTH D

DUNN COUNTY

CONVENTIONAL SYMBOLS

SECTION LINE	---	SECTION CORNER SYMBOL		R/W MONUMENT (TO BE SET)	●
QUARTER LINE	---	SECTION CORNER MONUMENT		NON-MONUMENTED R/W POINT	○
SIXTEENTH LINE	---	GEODETIC SURVEY MONUMENT		FOUND IRON PIN (1-INCH UNLESS NOTED)	IP ●
NEW REFERENCE LINE	---	SIXTEENTH CORNER MONUMENT		SIGN	
NEW R/W LINE	---	OFF-PREMISE SIGN			
EXISTING R/W OR HE LINE	---				
PROPERTY LINE	---				
LOT, TIE & OTHER MINOR LINES	---				
SLOPE INTERCEPT	---				
CORPORATE LIMITS	---				
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)	---				
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)	---				
TEMPORARY LIMITED EASEMENT AREA	---				
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)	---				
TRANSMISSION STRUCTURES	---				
BUILDING	---				
BRIDGE	---				
TO BE REMOVED	---				
CULVERT	---				
PARALLEL OFFSETS	---				

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC	PROPERTY LINE	PL
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM	REEL / IMAGE	R/I
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RESTRICTIVE DEVELOPMENT	RDE
CENTERLINE	C/L	EASEMENT	
CERTIFIED SURVEY MAP	CSM	RIGHT	RT
CONCRETE	CONC	RIGHT OF WAY	R/W
COUNTY	CO	SECTION	SEC
COUNTY TRUNK HIGHWAY	CTH	SEPTIC VENT	SEPV
DISTANCE	DIST	SQUARE FEET	SF
CORNER	COR	STATE TRUNK HIGHWAY	STH
DOCUMENT NUMBER	DOC	STATION	STA
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV	TRANSPORTATION PROJECT	TPP
GRID NORTH	GN	PLAT	
HIGHWAY EASEMENT	HE	UNITED STATES HIGHWAY	USH
IDENTIFICATION	ID	VOLUME	V
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		
POINT OF COMPOUND CURVE	PCC		

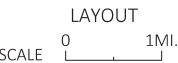
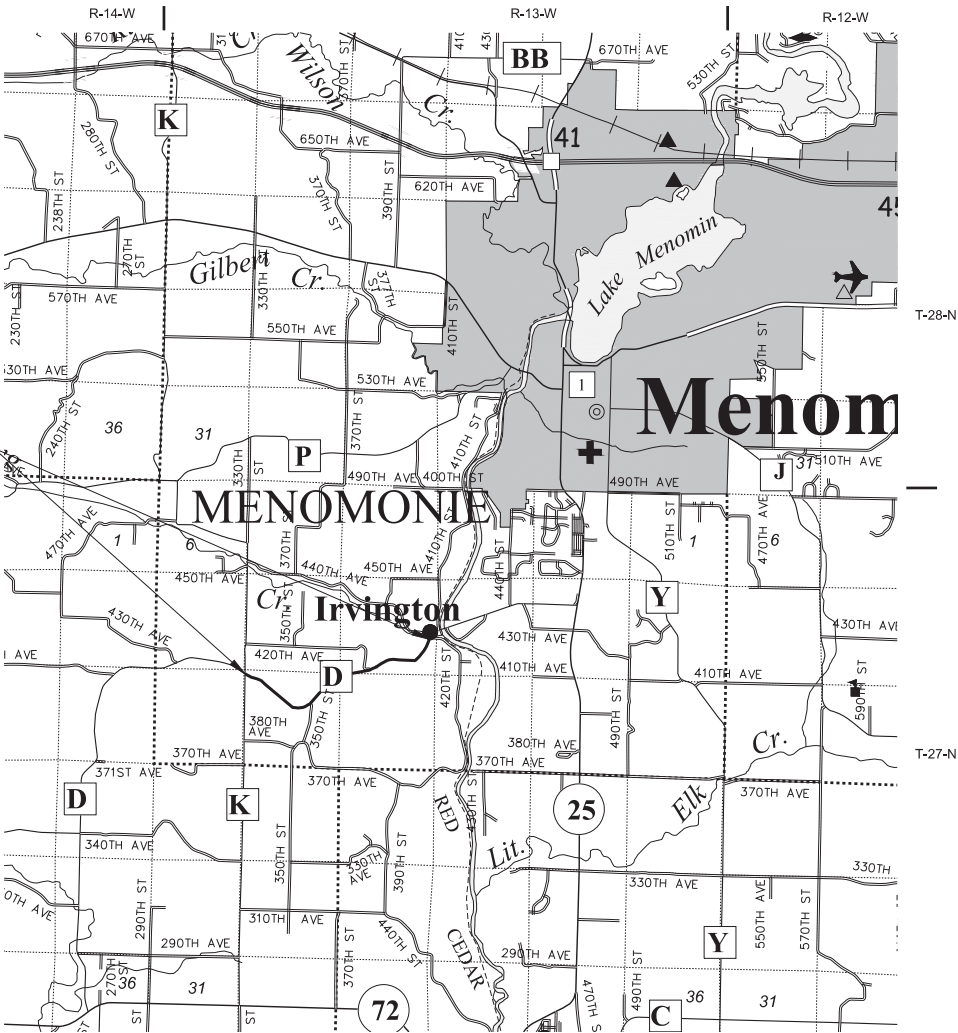
CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ / DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL UTILITY SYMBOLS

---	WATER
---	GAS
---	TELEPHONE
---	OVERHEAD
---	TRANSMISSION LINES
---	ELECTRIC
---	CABLE TELEVISION
---	FIBER OPTIC
---	SANITARY SEWER
---	STORM SEWER

PROJECT LOCATION



THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 7881-05-23.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS AND/OR EXISTING OCCUPATIONAL LINES.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL TLEs ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

PROPERTY LINES SHOWN ON THIS PLAT FOR PROPERTIES BEING IMPACTED ARE DRAWN FROM DATA DERIVED FROM FILED/RECORDED MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE DUNN COUNTY HIGHWAY DEPARTMENT.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINT OF REFERENCE: INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

PROJECT NUMBER 7881-05-23-4.01
SHEET 2-OF-3

TRANSPORTATION PROJECT PLAT NO: 7881-05-23-4.01

THAT PART OF LOT 1 OF CSM 4911 RECORDED AS DOCUMENT NUMBER 664191 AND THAT PART OF LOT 1 OF CSM 1644 RECORDED AS DOCUMENT NUMBER 425980, LOCATED IN AND THAT PART OF THE NORTHWEST ¼ OF THE NORTHWEST ¼ OF SECTION 17, AND THAT PART OF LOT 3 OF CSM 188 RECORDED AS DOCUMENT NUMBER 327787 LOCATED IN AND THAT PART OF THE NORTHEAST ¼ OF THE NORTHWEST ¼, SECTION 17, ALL IN TOWNSHIP 27 NORTH, RANGE 13 WEST, TOWN OF MENOMONIE, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER SCL - STH 25, CTH D, DUNN COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE DUNN COUNTY HIGHWAY DEPARTMENT DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

- TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 83.07 AND 83.08, WISCONSIN STATUTES, THE DUNN COUNTY HIGHWAY DEPARTMENT HEREBY ORDERS THAT:
- THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS Laid OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
 - THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE DUNN COUNTY HIGHWAY DEPARTMENT, PURSUANT TO THE PROVISIONS OF SECTION 83.07 AND 83.08, WISCONSIN STATUTES.

667732

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN

RECORDED ON
09/11/2023 03:09 PM

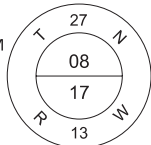
REC FEE: 25.00
PAGES: 3

The above recording information
verifies that this document has
been electronically recorded and
returned to the submitter.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 7881-05-23-4.01
SHEET 1 OF 3

FOUND BERNSTEN SURVEY NAIL
Y = 153,616.526
X = 143,762.074

FOUND 3" ALUMINUM
MONUMENT
Y = 153,580.891
X = 146,418.957



PI STA = 107+86.56
Y = 153164.780
X = 144013.443
DELTA = 17°51'57" LT
D = 5°24'19"
T = 166.62'
L = 330.53'
R = 1060.00'
PC STA = 106+19.95
PT STA = 109+50.47

LOT 1 CSM 4911
V. 25 P. 41
DOC. NO. 664191

NW-NW

SECTION LINE

589°13'54"E, 2657.12'
SEC. COR. TO SEC. COR.

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	OWNER(S)	INTEREST REQUIRED	R/W (ACRES)			
			NEW	EXISTING	TOTAL	TLE
1	TROY J. BRYANT AND MAEGAN A. BRYANT	FEE & TLE	0.203	0.724	0.927	0.068
2	BETTY A HOLDEN REVOCABLE LIVING TRUST	TLE	-----	-----	-----	0.446
3	KENNETH A. DRINKMAN AND JENNIE DRINKMAN	TLE	-----	-----	-----	0.063
4	DAVID A. FENNER AND NATTAYA FENNER	TLE	-----	-----	-----	0.062

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PURPOSE OF ALL THE TLES IS FOR GRADING, UNLESS NOTED.

UTILITY INTERESTS REQUIRED

UTILITY NO.	OWNER(S)	INTEREST REQUIRED
50	WEST WISCONSIN TELCOM COOPERATIVE	RELEASE OF RIGHTS

UTILITY EASEMENTS

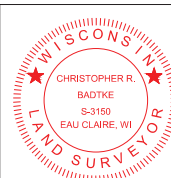
UTILITY NO.	OWNER(S)	EASEMENTS
50	WEST WISCONSIN TELCOM COOPERATIVE	NO EASEMENT OF RECORD - PARCEL 1

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL EXISTING IRON PINS ARE 0.75" IRON REBAR UNLESS OTHERWISE NOTED.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
CTH D: PREVIOUS PROJECT NUMBER S 087(9).
CTH K: PRESUMED TO BE 66 FEET IN WIDTH CENTERED ON THE EXISTING CENTERLINE OF THE TRAVELED WAY PER STATE STATUTE 82.31(2).

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 3.
FOR ADDITIONAL INFORMATION REFER TO THE EXTENSION SHEET, RECORDED AS SHEET 3 OF 3.



I, CHRISTOPHER R. BADTKE, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DUNN COUNTY HIGHWAY DEPARTMENT, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

CHRISTOPHER R. BADTKE
REGISTRATION NUMBER: S-3150
DATE: 06/23/2023

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE DUNN COUNTY HIGHWAY DEPARTMENT.
Dustin S. Binder
DATE: 09/11/2023

AYRES

TRANSPORTATION PROJECT PLAT NO: 7881-05-73 4.01
EXTENSION SHEET

RELOCATION ORDER SCL - STH 25, CTH D, DUNN COUNTY

4

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
100	104+69.24	39.40' LT
101	105+14.22	39.15' LT
102	106+13.48	38.61' LT
103	109+38.27	39.96' LT
104	112+47.57	41.15' LT
105	114+83.25	37.14' LT
106	125+96.69	32.97' LT
107	125+55.98	0.00' RT
108	125+15.19	33.04' RT

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
109	115+63.66	33.11' RT
110	115+63.65	40.11' RT
111	111+96.33	40.86' RT
112	109+38.87	40.04' RT
113	106+13.05	41.39' RT
114	106+06.36	41.36' RT
115	105+87.76	69.53' RT
116	105+51.94	92.06' RT
117	104+94.02	0.00' RT

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T150	107+50.00	38.90' LT
T151	108+00.00	50.00' LT
T152	109+50.47	50.00' LT
T153	110+99.86	50.00' LT
T154	111+87.74	39.12' LT
T155	114+50.00	40.23' LT
T156	114+50.00	50.00' LT
T157	115+00.00	50.00' LT
T158	115+00.00	35.58' LT
T159	117+50.00	32.90' LT
T160	118+00.00	45.00' LT
T161	120+50.00	45.00' LT
T162	121+00.00	32.93' LT

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T163	122+30.00	32.94' LT
T164	122+30.00	38.50' LT
T165	122+80.00	38.50' LT
T166	122+80.00	32.94' LT
T167	124+50.00	32.95' LT
T168	125+00.00	45.00' LT
T169	126+00.00	45.00' LT
T170	126+05.32	39.96' LT
T171	123+50.00	33.05' RT
T172	123+00.00	40.00' RT
T173	122+75.00	60.00' RT
T174	122+25.00	60.00' RT
T175	122+00.00	40.00' RT

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T176	121+75.00	40.00' RT
T177	121+25.00	33.07' RT
T178	116+50.00	33.11' RT
T179	115+00.00	60.00' RT
T180	114+50.25	60.01' RT
T181	113+50.00	50.00' RT
T182	111+00.00	60.00' RT
T183	109+99.86	60.00' RT
T184	109+00.00	50.00' RT
T185	107+50.00	50.00' RT
T186	107+00.00	41.26' RT

COURSE TABLE					
COURSE	BEARING	DISTANCE	COURSE	BEARING	DISTANCE
100-101	S57°59'15"E	44.98'	109-110	S39°49'42"W	7.00'
101-102	S57°59'15"E	99.27'	110-111	SEE CURVE TABLE	
102-103	SEE CURVE TABLE		111-112	N75°57'32"W	257.47'
103-104	S75°57'32"E	311.75'	112-113	SEE CURVE TABLE	
104-105	SEE CURVE TABLE		113-114	N57°59'15"W	6.69'
105-106	S50°10'20"E	1116.98'	114-115	S65°08'08"W	33.76'
106-107	N89°10'14"W	52.38'	115-116	S89°31'30"W	42.32'
107-108	N89°10'14"W	52.49'	116-117	N00°28'30"W	108.76'
108-109	N50°10'20"W	951.44'	117-100	N00°28'30"W	46.54'

CURVE TABLE				
CURVE #	LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
102-103	313.04'	998.03'	S66°58'24"E	311.76'
104-105	248.06'	549.32'	S63°01'21"E	245.96'
110-111	349.58'	776.72'	N63°03'55"W	346.64'
112-113	338.14'	1078.03'	N66°58'24"W	336.75'

4

TRANSPORTATION PROJECT PLAT NO: 7881-05-23-4.04
EXTENSION SHEET

RELOCATION ORDER SCL - STH 25, CTH D, DUNN COUNTY

4

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
304	184+71.00	45.41'
305	184+67.96	33.40'
306	184+59.65	0.00'
307	184+51.71	32.68'
400	199+07.10	60.00'
401	198+03.37	60.00'
402	194+50.00	60.00'
403	194+00.00	40.00'
404	193+13.33	40.00'
405	192+11.60	40.00'
406	191+00.00	40.00'
407	190+50.00	50.00'
408	189+82.27	50.00'
409	188+00.00	50.00'
410	187+50.00	33.70'
411	186+73.47	34.39'
412	185+30.33	33.16'
413	184+75.00	60.00'
414	185+74.25	90.09'
415	186+94.80	76.89'

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
416	187+23.04	50.00'
417	189+00.00	50.02'
418	189+50.00	32.68'
419	189+83.69	32.61'
420	192+08.99	33.04'
421	193+88.67	35.09'
422	195+75.44	34.58'
423	197+59.48	33.98'
424	199+32.85	33.45'
425	201+39.85	33.00'
426	204+79.65	31.12'
427	206+65.32	33.00'
428	208+41.92	35.29'
429	210+78.53	34.03'
430	212+13.92	27.41'
431	212+37.70	27.97'
432	212+30.91	0.00'
433	212+23.19	38.39'
434	212+08.60	38.73'
435	211+48.08	40.00'

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
436	206+51.72	40.00'
437	203+32.57	40.00'
438	201+38.75	60.00'

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T450	187+00.00	50.00'
T451	186+75.00	59.89'
T452	186+50.00	60.00'
T453	186+25.00	34.32'
T454	192+11.60	90.00'
T455	193+13.33	45.00'
T456	194+50.00	45.00'
T457	195+50.00	75.00'
T458	198+03.37	75.00'
T459	200+50.22	75.00'
T460	201+38.75	55.00'
T461	203+32.57	55.00'
T462	206+51.72	55.00'
T463	208+00.00	55.00'
T464	209+00.00	40.00'
T465	211+48.08	40.00'
T466	212+40.99	39.97'
T467	211+00.00	40.00'
T468	210+00.00	55.00'
T469	207+50.00	55.00'

4

PROJECT NUMBER 7881-05-23 - 4.04
SHEET 2 OF 2

4

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667756

**DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN**

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**DUNN COUNTY, WI
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SHEET 1 OF 2**

4

TRANSPORTATION PROJECT PLAT NO: 7881-05-23-4.02
EXTENSION SHEET

RELOCATION ORDER SCL - STH 25, CTH D, DUNN COUNTY

4

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
109	125+55.98	0.00'
200	137+14.54	46.53' LT
201	142+20.71	45.98' LT
202	145+46.23	45.45' LT
203	147+95.45	45.00' LT
204	153+88.67	44.88' LT
205	153+39.31	1.64' LT
206	153+37.44	0.00'
207	152+85.97	45.10' RT
208	147+95.44	45.01' RT
209	147+94.23	45.01' RT
210	147+84.88	51.59' RT
211	147+08.21	224.18' RT

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
212	146+72.30	174.99' RT
213	147+21.85	60.44' RT
214	146+91.65	44.78' RT
215	140+52.83	43.76' RT
216	138+37.51	58.53' RT
217	137+52.52	58.83' RT
218	136+37.18	73.40' RT
219	134+21.70	43.35' RT
220	131+36.52	39.99' RT
221	125+06.54	40.04' RT
222	126+05.32	39.96' LT
223	131+36.83	40.00' LT
224	134+21.73	46.64' LT

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T250	140+50.00	46.22' LT
T251	141+00.00	65.00' LT
T252	143+50.00	65.00' LT
T253	143+50.00	80.00' LT
T254	145+50.00	80.00' LT
T255	146+00.00	55.00' LT
T256	147+93.99	55.00' LT
T257	148+50.00	55.00' LT
T258	149+00.00	44.98' LT
T259	149+75.00	45.04' RT
T260	149+25.00	60.00' RT
T261	147+84.04	60.00' RT
T262	144+00.00	60.00' RT
T263	144+00.00	44.27' RT
T264	130+50.00	39.99' RT

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T265	130+25.00	50.00' RT
T266	129+00.00	50.00' RT
T267	128+75.00	40.01' RT
T268	127+00.00	39.97' LT
T269	127+00.00	50.00' LT
T270	127+50.00	50.00' LT
T271	127+50.00	39.97' LT
T272	134+25.00	46.64' LT
T273	134+25.00	60.00' LT
T274	134+80.00	60.00' LT
T275	134+80.00	46.63' LT
T276	135+50.00	46.61' LT
T277	135+50.00	60.00' LT
T278	136+50.00	60.00' LT
T279	136+50.00	46.57' LT

CURVE TABLE				
CURVE #	LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
200-201	479.60'	836.85'	S85°34'53"E	473.06'
202-203	236.52'	836.85'	N48°46'20"E	235.73'
208-209	1.21'	926.85'	S40°42'45"W	1.21'
210-211	199.96'	233.00'	S19°02'50"E	193.88'
212-213	130.86'	167.00'	N16°54'38"W	127.54'
214-215	670.86'	926.85'	S68°08'59"W	656.31'
224-200	277.34'	836.85'	S59°40'09"E	276.07'

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
200-201	SEE CURVE TABLE	
201-202	N67°26'05"E	306.90'
202-203	SEE CURVE TABLE	
203-204	N40°40'31"E	593.22'
204-205	S00°33'27"E	65.62'
205-206	S00°33'27"E	2.49'
206-207	S00°33'27"E	68.43'
207-208	S40°40'31"W	490.53'
208-209	SEE CURVE TABLE	
209-210	S07°10'12"W	11.84'
210-211	SEE CURVE TABLE	
211-212	N84°26'00"W	66.02'
212-213	SEE CURVE TABLE	
213-214	S72°23'31"W	35.63'
214-215	SEE CURVE TABLE	
215-216	N87°52'44"W	227.72'
216-217	N74°37'00"W	90.61'
217-218	N74°37'00"W	124.75'
218-219	N49°45'36"W	231.10'
219-220	N49°10'15"W	285.23'
220-221	N50°10'20"W	629.98'
221-222	S89°10'14"E	63.62'
222-109	S89°10'14"E	63.49'
109-223	S50°10'20"E	531.51'
223-224	S51°10'48"E	284.93'
224-200	SEE CURVE TABLE	

4

TRANSPORTATION PROJECT PLAT NO: 7881-05-23-4.03

THAT PART OF THE NORTHEAST ¼ OF THE NORTHEAST ¼ OF SECTION 17, AND THAT PART OF THE NORTHWEST ¼ OF THE NORTHWEST ¼ OF SECTION 16, AND THAT PART OF THE SOUTHWEST ¼ OF THE SOUTHWEST ¼ OF SECTION 9, ALL IN TOWNSHIP 27 NORTH, RANGE 13 WEST, TOWN OF MENOMONIE, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER SCL - 5TH 25, CTH D, DUNN COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE DUNN COUNTY HIGHWAY DEPARTMENT DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 83.07 AND 83.08, WISCONSIN STATUTES, THE DUNN COUNTY HIGHWAY DEPARTMENT HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAY OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE DUNN COUNTY HIGHWAY DEPARTMENT, PURSUANT TO THE PROVISIONS OF SECTION 83.07 AND 83.08, WISCONSIN STATUTES.

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL EXISTING IRON PINS ARE 0.75" IRON REBAR UNLESS OTHERWISE NOTED.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
CTH D: PREVIOUS PROJECT NUMBER S 087(9), CSM 4443, AND IS PARTIALLY PRESUMED TO BE 66 FEET IN WIDTH CENTERED ON THE EXISTING CENTERLINE OF THE TRAVELED WAY PER STATE STATUTE 82.31(2).
420TH AVENUE: CSM 4443, PRESUMED TO BE 66 FEET IN WIDTH CENTERED ON THE EXISTING CENTERLINE OF THE TRAVELED WAY PER STATE STATUTE 82.31(2).

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 3 OF DOCUMENT NUMBER 667732.

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	OWNER(S)	INTEREST REQUIRED	R/W (ACRES)			
			NEW	EXISTING	TOTAL	TLE
13	BRIAN & TRACIE KNOSPE REVOCABLE TRUST	TLE	-----	-----	-----	0.122
14	JEFFREY A. BOERNER	TLE	-----	-----	-----	0.408
16	MARLIN L. BUSS	FEE & TLE	0.089	1.026	1.115	0.002

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PURPOSE OF ALL THE TLES IS FOR GRADING, UNLESS NOTED.

UTILITY EASEMENTS

UTILITY NO.	OWNER(S)	EASEMENTS
52	DUNN ENERGY COOPERATIVE	NO EASEMENT OF RECORD- PARCEL 14

UTILITY INTERESTS REQUIRED

UTILITY NO.	OWNER(S)	INTEREST REQUIRED
52	DUNN ENERGY COOPERATIVE	RELEASE OF RIGHTS

667757

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN

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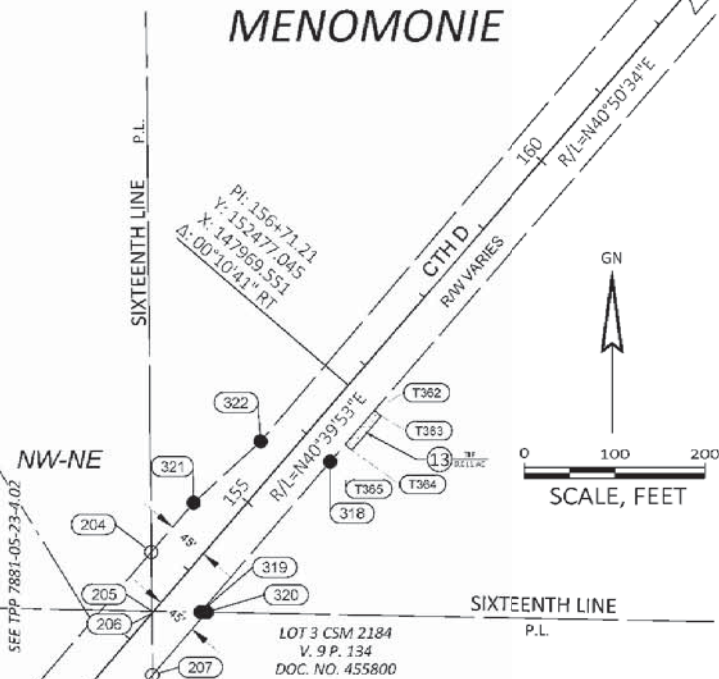
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PROJECT NUMBER 7881-05-23-4.03
SHEET 1 OF 1

TOWN

OF

MENOMONIE



POINT	STATION	OFFSET
T350	181+00.00	35.04' RT
T351	180+50.00	75.00' RT
T352	179+50.00	75.00' RT
T353	177+50.00	60.00' RT
T354	176+00.00	40.00' RT
T355	175+00.00	40.00' RT
T356	174+00.13	50.00' RT
T357	173+50.31	50.00' RT
T358	171+50.00	50.00' RT

POINT	STATION	OFFSET
T359	170+50.00	65.00' RT
T360	169+50.00	60.00' RT
T361	168+50.00	38.09' RT
T362	156+69.00	40.20' RT
T363	156+69.00	50.00' RT
T364	156+19.00	50.00' RT
T365	156+19.00	40.07' RT
T366	165+75.00	43.43' LT
T367	165+75.00	60.00' LT

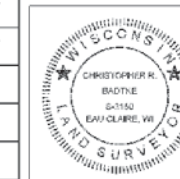
POINT	STATION	OFFSET
204	153+88.67	44.88' LT
205	153+39.31	1.64' LT
206	153+37.44	0.00'
207	152+85.97	45.10' RT
300	171+30.40	43.15' LT
301	177+00.15	45.60' LT
302	177+31.14	45.73' LT
303	182+70.61	43.33' LT
304	184+71.00	45.41' LT
305	184+67.96	33.40' LT
306	184+59.65	0.00'
307	184+51.71	32.68' RT
308	184+41.56	32.77' RT
309	184+00.00	50.00' RT
310	182+00.00	50.00' RT

POINT	STATION	OFFSET
311	181+50.00	35.25' RT
312	180+63.73	34.73' RT
313	177+31.41	32.27' RT
314	171+16.68	34.89' RT
315	171+15.41	41.89' RT
316	169+74.76	37.93' RT
317	164+92.24	39.86' RT
318	155+93.70	40.00' RT
319	153+73.74	40.00' RT
320	153+77.97	45.11' RT
321	154+60.76	45.00' LT
322	155+60.76	33.00' LT
323	165+39.41	41.43' LT
324	169+06.07	40.13' LT
325	171+28.31	31.14' LT

CURVE #	LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
302-303	537.28'	9525.01'	N77°32'18"E	537.21'
311-312	86.27'	9603.01'	S76°54'16"W	86.27'
312-313	333.93'	9603.01'	S78°09'29"W	333.91'
316-317	458.21'	683.50'	S59°56'57"W	449.68'
323-324	390.95'	577.74'	N59°46'05"E	383.54'

COURSE	BEARING	DISTANCE
300-301	N79°09'15"E	569.75'
301-302	N79°09'15"E	30.95'
302-303	SEE CURVE TABLE	
303-304	N75°55'20"E	199.93'
304-305	S00°00'36"W	12.37'
305-306	S00°00'36"W	34.41'
306-307	S00°00'36"W	33.64'
307-308	S75°55'20"W	10.16'
308-309	S54°02'45"W	44.99'
309-310	S76°33'37"W	200.00'
310-311	N87°00'14"W	52.13'
311-312	SEE CURVE TABLE	
312-313	SEE CURVE TABLE	
313-314	S79°09'15"W	614.52'
314-315	S00°43'39"E	7.11'

COURSE	BEARING	DISTANCE
315-316	S79°09'15"W	138.43'
316-317	SEE CURVE TABLE	
317-318	S40°49'07"W	898.41'
318-319	S40°39'51"W	219.96'
319-320	S88°55'09"E	6.63'
320-207	S40°40'31"W	92.00'
207-206	N00°33'27"W	68.44'
206-205	N00°33'27"W	2.49'
205-204	N00°33'27"W	65.62'
204-321	N40°40'31"E	72.09'
321-322	N47°26'06"E	100.70'
322-323	N40°22'56"E	980.85'
323-324	SEE CURVE TABLE	
324-325	N79°09'15"E	225.52'
325-300	N00°43'39"W	12.19'



I, CHRISTOPHER R. BADTKE, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DUNN COUNTY HIGHWAY DEPARTMENT, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT THIS PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

CHRISTOPHER R. BADTKE
REGISTRATION NUMBER: 5-3150

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE DUNN COUNTY HIGHWAY DEPARTMENT.

Dustin S. Binder
DUSTIN BINDER

09/12/2023
DATE

09/12/2023
DATE

TRANSPORTATION PROJECT PLAT NO: 7881-05-23-4.04

THAT PART OF THE SOUTHEAST ¼ OF THE SOUTHWEST ¼ OF SECTION 9, AND THAT PART OF THE SOUTHWEST ¼ OF THE SOUTHEAST ¼ OF SECTION 9, ALL IN TOWNSHIP 27 NORTH, RANGE 13 WEST, TOWN OF MENOMONIE, DUNN COUNTY, WISCONSIN.

RELOCATION ORDER SCL - STH 25, CTH D, DUNN COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE DUNN COUNTY HIGHWAY DEPARTMENT DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 83.07 AND 83.08, WISCONSIN STATUTES, THE DUNN COUNTY HIGHWAY DEPARTMENT HEREBY ORDERS THAT:

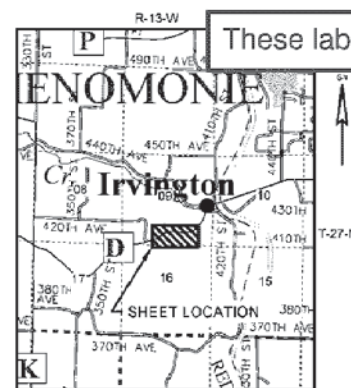
- THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAYED OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SHOWN FOR THE ABOVE PROJECT.
- THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE DUNN COUNTY HIGHWAY DEPARTMENT, PURSUANT TO THE PROVISIONS OF SECTION 83.07 AND 83.08, WISCONSIN STATUTES.

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL EXISTING IRON PINS ARE 0.75" IRON REBAR UNLESS OTHERWISE NOTED.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
CTH D: PREVIOUS PROJECT NUMBER S 087(9), CSM 4443, PLAT OF SURVEY 7/22/2021,
420TH AVENUE: CSM 4443, PRESUMED TO BE 66 FEET IN WIDTH CENTERED ON THE EXISTING CENTERLINE OF THE TRAVELED WAY PER STATE STATUTE 82.31(2).

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 3 OF DOCUMENT NUMBER 667732
FOR ADDITIONAL INFORMATION REFER TO THE EXTENSION SHEET, RECORDED AS SHEET 2 OF 2.



These labels should be 52

UTILITY INTERESTS REQUIRED		
UTILITY NO.	OWNER(S)	INTEREST REQUIRED
50	WEST WISCONSIN TELCOM COOP	RELEASE OF RIGHTS
51	DUNN ENERGY COOPERATIVE	RELEASE OF RIGHTS

UTILITY EASEMENTS		
UTILITY NO.	OWNER(S)	EASEMENTS
50	WEST WISCONSIN TELCOM COOP	NO EASEMENT OF RECORD - PARCEL 16 & 17
51	DUNN ENERGY COOPERATIVE	NO EASEMENT OF RECORD - PARCEL 16 & 18

667758

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN

RECORDED ON
09/13/2023 10:12 AM

REC FEE: 25.00

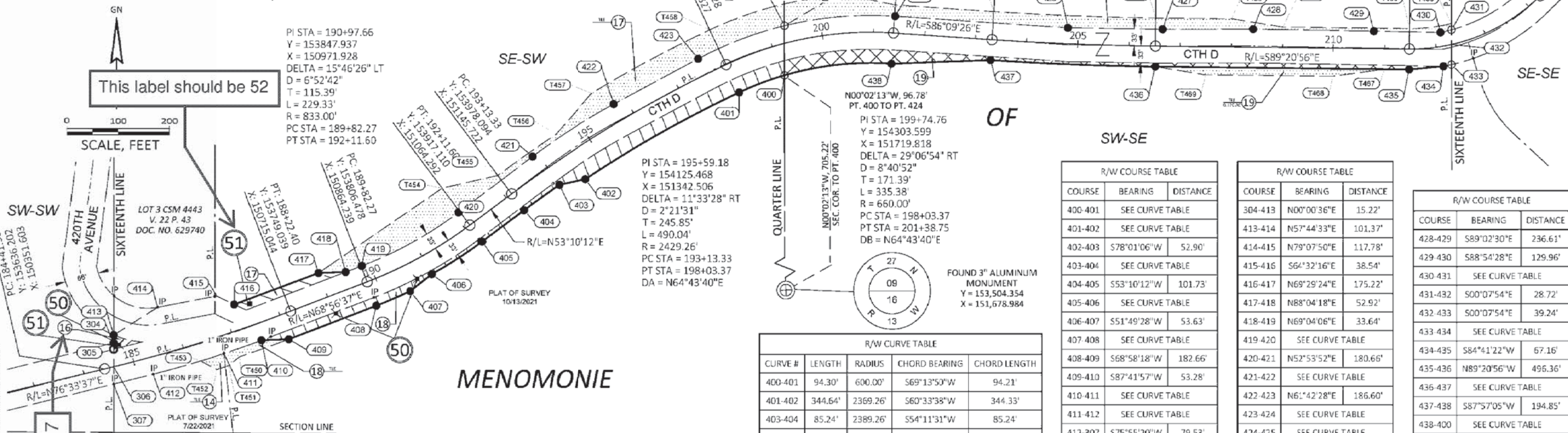
PAGES: 2

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verifies that this document has
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 7881-05-23-4.04
SHEET 1 OF 2

4

4



This label should be 52

SCALE, FEET
0 100 200

LOT 3 CSM 4443
V. 22 P. 43
DOC. NO. 629740

PLAT OF SURVEY
7/22/2021

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	OWNER(S)	INTEREST REQUIRED	R/W (ACRES)			
			NEW	EXISTING	TOTAL	TLE
14	JEFFREY A. BOERNER	TLE	-----	-----	-----	0.020
17	THOMAS A. LARRABEE	FEE & TLE	0.094	1.265	1.359	0.026
18	CHARLES STOUFF	FEE & TLE	0.485	0.942	1.427	0.043
19	IRVINGTON MOUNTAIN TREE FARM LLC	FEE & TLE	0.355	1.979	2.334	0.717

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PURPOSE OF ALL THE TLES IS FOR GRADING, UNLESS NOTED.

R/W CURVE TABLE				
CURVE #	LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
400-401	94.30'	600.00'	S69°13'50"W	94.21'
401-402	344.64'	2369.26'	S60°33'38"W	344.33'
403-404	85.24'	2389.26'	S54°11'31"W	85.24'
405-406	116.95'	873.00'	S57°00'28"W	116.87'
407-408	71.80'	883.00'	S66°36'51"W	71.78'
410-411	77.45'	2178.13'	S70°38'52"W	77.44'
411-412	144.85'	2033.42'	S73°50'24"W	144.81'
419-420	216.47'	767.00'	N60°58'59"E	215.76'
421-422	189.59'	1233.00'	N57°18'10"E	189.40'
423-424	180.66'	709.59'	N69°00'05"E	180.18'
424-425	217.32'	709.59'	N85°04'09"E	216.47'
430-431	21.93'	322.00'	N76°37'59"E	21.93'
433-434	16.18'	388.00'	S78°30'24"W	16.18'
436-437	321.38'	5769.65'	N87°45'11"W	321.34'
438-400	210.59'	600.00'	S83°47'17"W	209.51'

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
400-401	SEE CURVE TABLE	
401-402	SEE CURVE TABLE	
402-403	S78°01'06"W	52.90'
403-404	SEE CURVE TABLE	
404-405	S53°10'12"W	101.73'
405-406	SEE CURVE TABLE	
406-407	S51°49'28"W	53.63'
407-408	SEE CURVE TABLE	
408-409	S68°58'18"W	182.66'
409-410	S87°41'57"W	53.28'
410-411	SEE CURVE TABLE	
411-412	SEE CURVE TABLE	
412-307	S75°55'20"W	79.53'
307-306	N00°00'36"E	33.64'
306-305	N00°00'36"E	34.41'
305-304	N00°00'36"E	12.37'

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
304-413	N00°00'36"E	15.22'
413-414	N57°44'33"E	101.37'
414-415	N79°07'50"E	117.78'
415-416	S64°32'16"E	38.54'
416-417	N69°29'24"E	175.22'
417-418	N88°04'18"E	52.92'
418-419	N69°04'06"E	33.64'
419-420	SEE CURVE TABLE	
420-421	N52°53'52"E	180.66'
421-422	SEE CURVE TABLE	
422-423	N61°42'28"E	186.60'
423-424	SEE CURVE TABLE	
424-425	SEE CURVE TABLE	
425-426	S86°09'26"E	338.99'
426-427	S89°08'03"E	184.72'
427-428	N89°54'25"E	176.61'

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
428-429	S89°02'30"E	236.61'
429-430	S88°54'28"E	129.96'
430-431	SEE CURVE TABLE	
431-432	S00°07'54"E	28.72'
432-433	S00°07'54"E	39.24'
433-434	SEE CURVE TABLE	
434-435	S84°41'22"W	67.16'
435-436	N89°20'56"W	496.36'
436-437	SEE CURVE TABLE	
437-438	S87°57'05"W	194.85'
438-400	SEE CURVE TABLE	



I, CHRISTOPHER R. BADTKE, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DUNN COUNTY HIGHWAY DEPARTMENT, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

CHRISTOPHER R. BADTKE
REGISTRATION NUMBER: 5-3150
DATE: 09/12/2023

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE DUNN COUNTY HIGHWAY DEPARTMENT.
Dustin S. Binder
DATE: 09/12/2023

TRANSPORTATION PROJECT PLAT NO: 7881-05-23-4.04
EXTENSION SHEET

RELOCATION ORDER SCL - STH 25, CTH D, DUNN COUNTY

4

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
304	184+71.00	45.41'
305	184+67.96	33.40'
306	184+59.65	0.00'
307	184+51.71	32.68'
400	199+07.10	60.00'
401	198+03.37	60.00'
402	194+50.00	60.00'
403	194+00.00	40.00'
404	193+13.33	40.00'
405	192+11.60	40.00'
406	191+00.00	40.00'
407	190+50.00	50.00'
408	189+82.27	50.00'
409	188+00.00	50.00'
410	187+50.00	33.70'
411	186+73.47	34.39'
412	185+30.33	33.16'
413	184+75.00	60.00'
414	185+74.25	90.09'
415	186+94.80	76.89'

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
416	187+23.04	50.00'
417	189+00.00	50.02'
418	189+50.00	32.68'
419	189+83.69	32.61'
420	192+08.99	33.04'
421	193+88.67	35.09'
422	195+75.44	34.58'
423	197+59.48	33.98'
424	199+32.85	33.45'
425	201+39.85	33.00'
426	204+79.65	31.12'
427	206+65.32	33.00'
428	208+41.92	35.29'
429	210+78.53	34.03'
430	212+13.92	27.41'
431	212+37.70	27.97'
432	212+30.91	0.00'
433	212+23.19	38.39'
434	212+08.60	38.73'
435	211+48.08	40.00'

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
436	206+51.72	40.00'
437	203+32.57	40.00'
438	201+38.75	60.00'

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T450	187+00.00	50.00'
T451	186+75.00	59.89'
T452	186+50.00	60.00'
T453	186+25.00	34.32'
T454	192+11.60	90.00'
T455	193+13.33	45.00'
T456	194+50.00	45.00'
T457	195+50.00	75.00'
T458	198+03.37	75.00'
T459	200+50.22	75.00'
T460	201+38.75	55.00'
T461	203+32.57	55.00'
T462	206+51.72	55.00'
T463	208+00.00	55.00'
T464	209+00.00	40.00'
T465	211+48.08	40.00'
T466	212+40.99	39.97'
T467	211+00.00	40.00'
T468	210+00.00	55.00'
T469	207+50.00	55.00'

4

THAT PART OF THE NORTHEAST $\frac{1}{4}$ OF THE SOUTHEAST $\frac{1}{4}$, AND THAT PART OF THE SOUTHEAST $\frac{1}{4}$ OF THE SOUTHEAST $\frac{1}{4}$ OF SECTION 9, TOWNSHIP 27 NORTH, RANGE 13 WEST, TOWN OF MEMONIE, DUNN COUNTY, WISCONSIN.

DUNN COUNTY, WISCONSIN.
RELOCATION ORDER SCL - 5TH 25, CTH D, DUNN COUNTY

RELOCATION ORDER SCL - STH 25, CTH D, DUNN COUNTY

TO PROPERLY ESTABLISH OUT, WIDEN, ENLARGE, EXTEND, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE DUNN COUNTY HIGHWAY DEPARTMENT DEMITS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

PAID IN FULL ON NIGHTS IN PAID FOR THE ABOVE PROJECT

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE DUNN COUNTY HIGHWAY DEPARTMENT, PURSUANT TO THE PROVISIONS OF SECTION 83.07 AND 83.08, WISCONSIN STATUTES.

667759

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUNH

RECORDED ON
09/13/2023 10:12 AM

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PROJECT NUMBER 688-05-23-A05
SHEET 1 OF 1

39

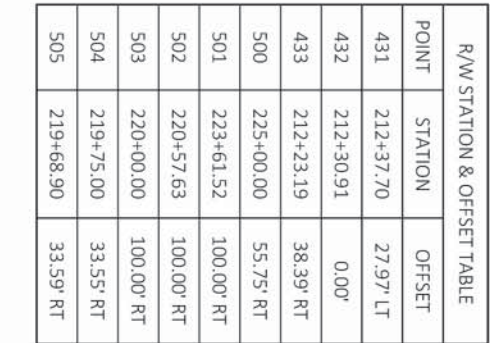
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PURPOSE OF ALL THE TLES IS FOR GRADING, UNLESS NOTED

0 100 200
SCALE, FEET

TOWN

UTILITY NO.	OWNER(S)	EASEMENTS
52	DUNN ENERGY COOPERATIVE	NO EASEMENT OF RECORD - PARCEL 21
53	NORTHERN STATES POWER COMPANY	V. 166, P. 343, DOC. NO. 260349 - PARCEL 19 V. 166, P. 344, DOC. NO. 260350 - PARCEL 22 V. 169, P. 383, DOC. NO. 269812 - PARCEL 22



R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
506	217+72.57	34.13 RT
507	214+13.02	33.39 RT
508	214+25.09	32.97' LT
509	217+71.80	31.87' LT
510	219+69.07	32.41' LT
511	220+71.18	32.92' LT
512	223+53.75	32.97' LT
513	224+57.15	33.01' LT
514	224+73.09	0.00'

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T466	212+40.99	39.97' LT
T550	214+31.20	40.00' LT
T551	219+15.82	40.00' LT
T552	220+00.00	40.00' LT
T553	220+50.00	50.00' LT
T554	221+50.00	50.00' LT
T555	222+00.00	40.00' LT
T556	223+61.52	40.00' LT
T557	226+97.83	40.00' LT
T558	226+97.83	35.32' LT

COURSE TABLE		
COURSE	BEARING	DISTANCE
500-501	S03°30'12"W	145.37'
501-502	SEE CURVE TABLE	
502-503	S37°39'00"W	57.63'
503-504	N72°58'06"W	70.99'
504-505	S37°19'13"W	6.10'
505-506	S38°16'56"W	197.59'
506-507	SEE CURVE TABLE	
507-433	SEE CURVE TABLE	
433-432	N00°07'54"W	39.24'
432-431	N00°07'54"W	28.72'
431-508	SEE CURVE TABLE	
508-509	SEE CURVE TABLE	
509-510	N38°16'56"E	196.04'
510-511	N37°19'13"E	101.70'
511-512	SEE CURVE TABLE	
512-513	N21°13'00"E	103.16'
513-514	N85°27'18"E	36.66'
514-500	N85°27'18"E	61.91'



I, CHRISTOPHER R. BADTKE, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DUNN COUNTY HIGHWAY DEPARTMENT, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.



CHRISTOPHER R. BADTKE
REGISTRATION NUMBER: S-3150

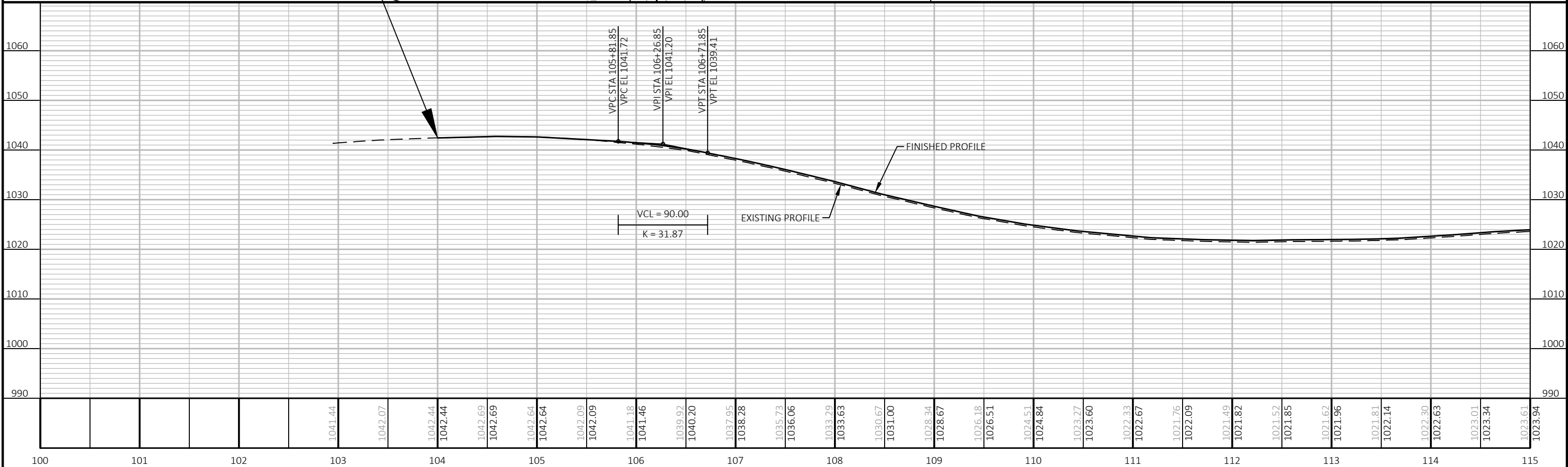
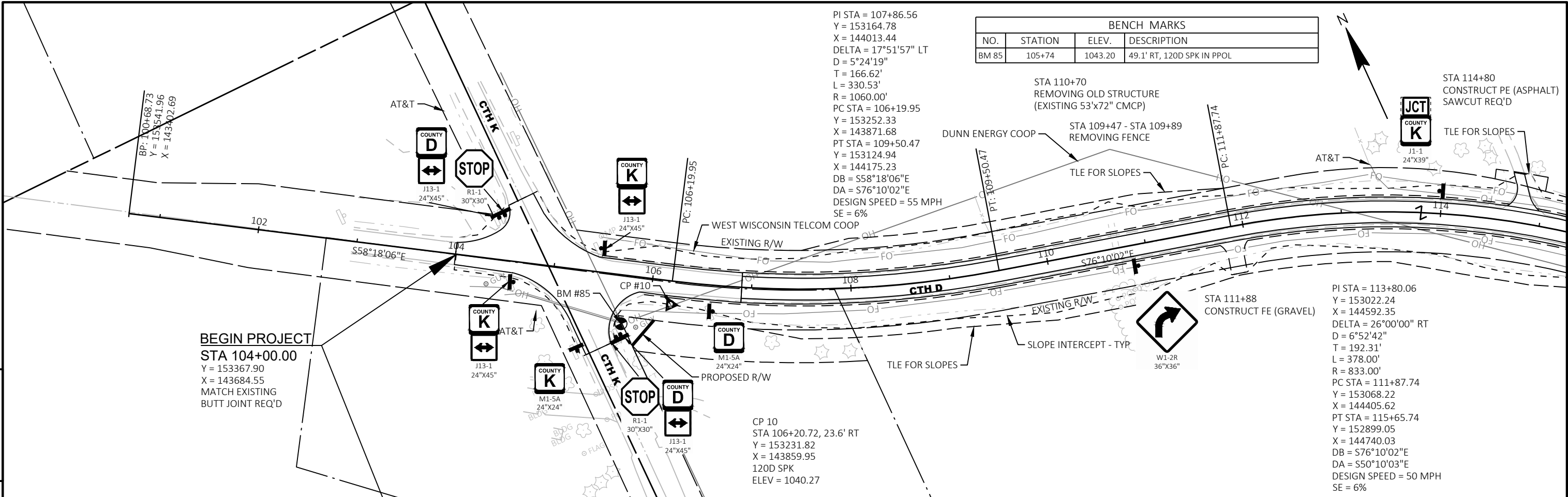
DATE 09/12/2023

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE DUNN COUNTY HIGHWAY DEPARTMENT.

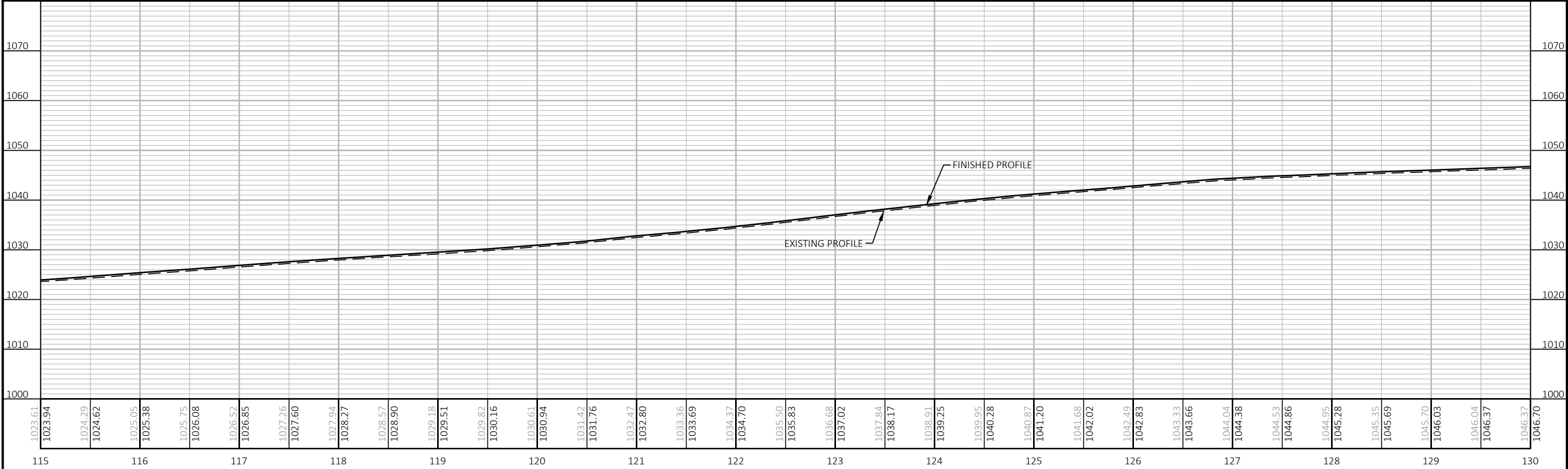
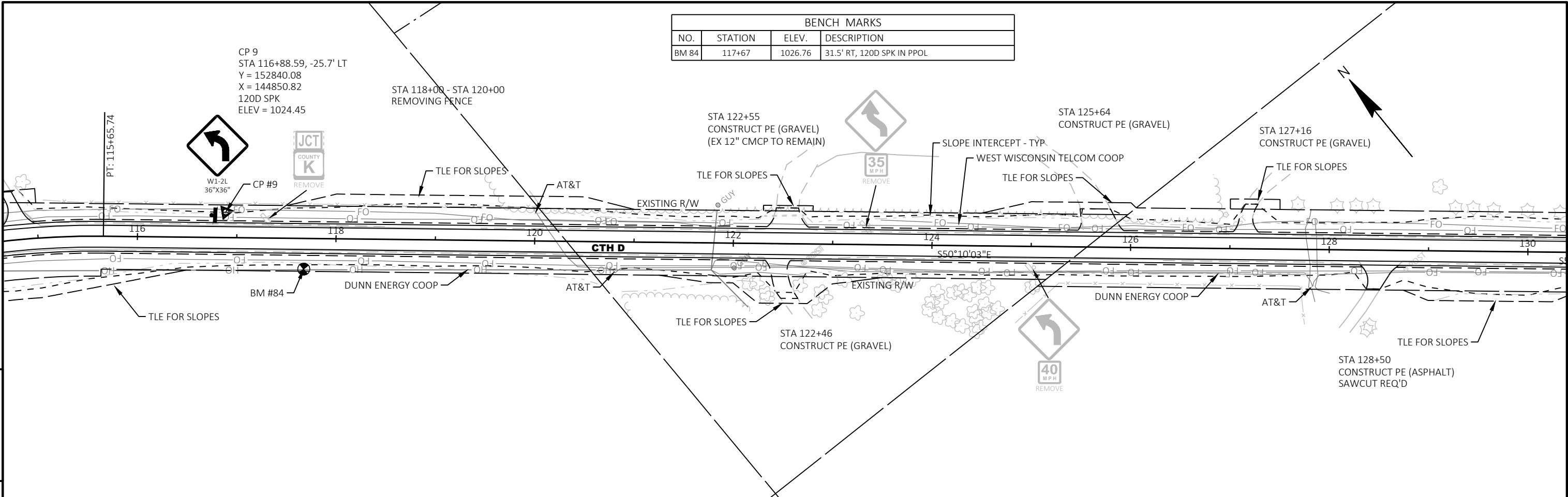
Dustin S. Bindler

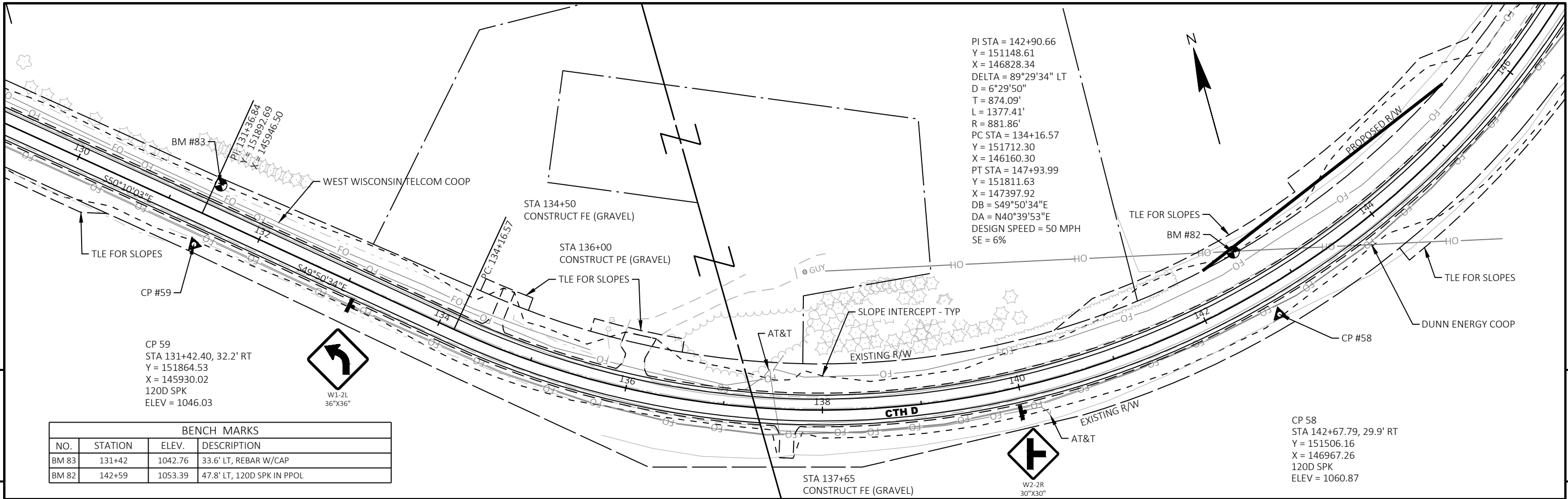
DUSTIN BINDER

DATE _____

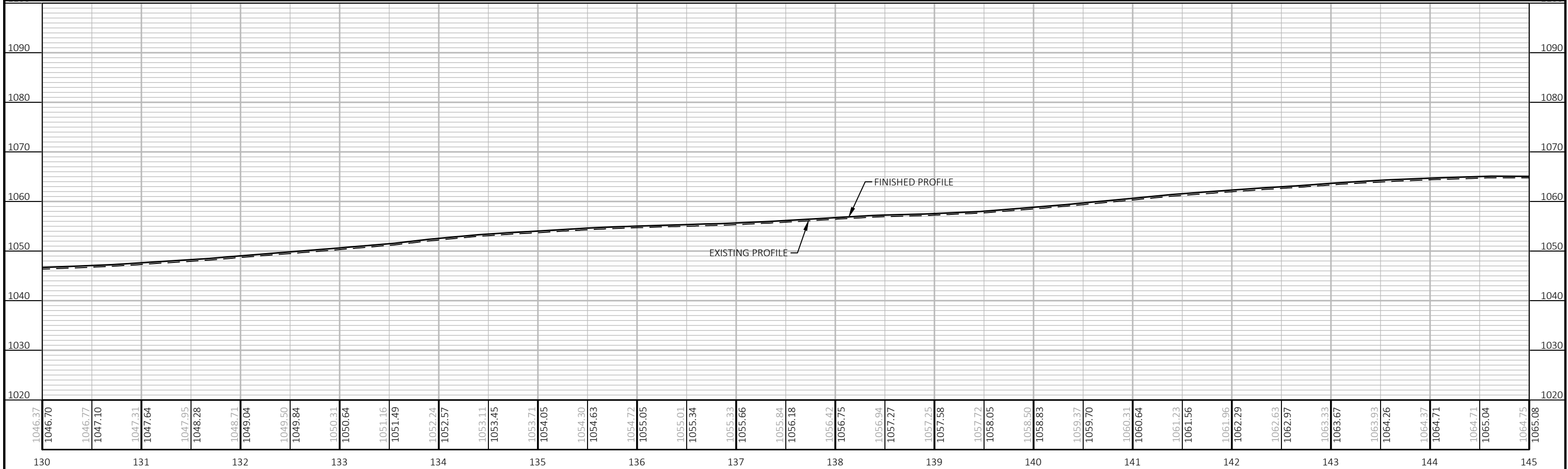


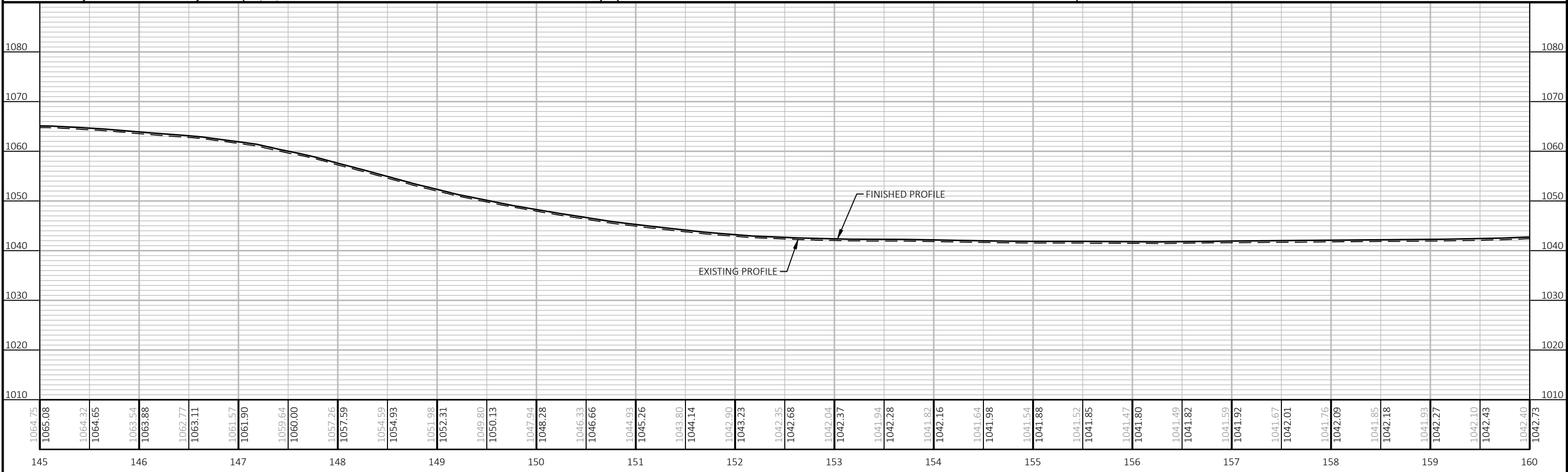
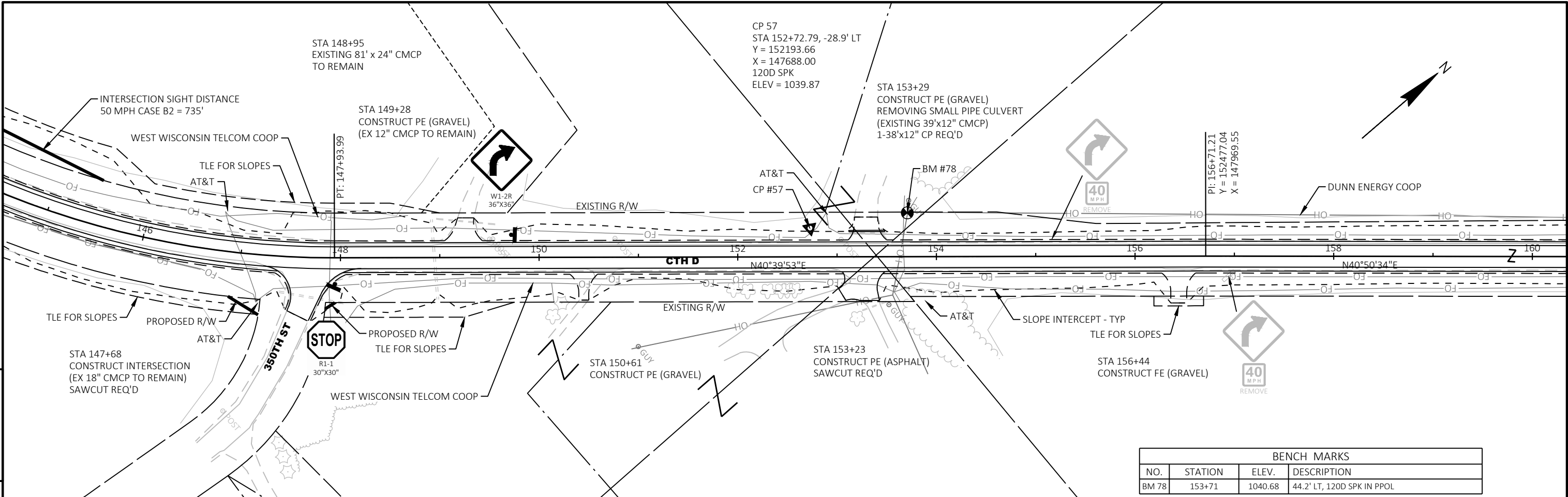
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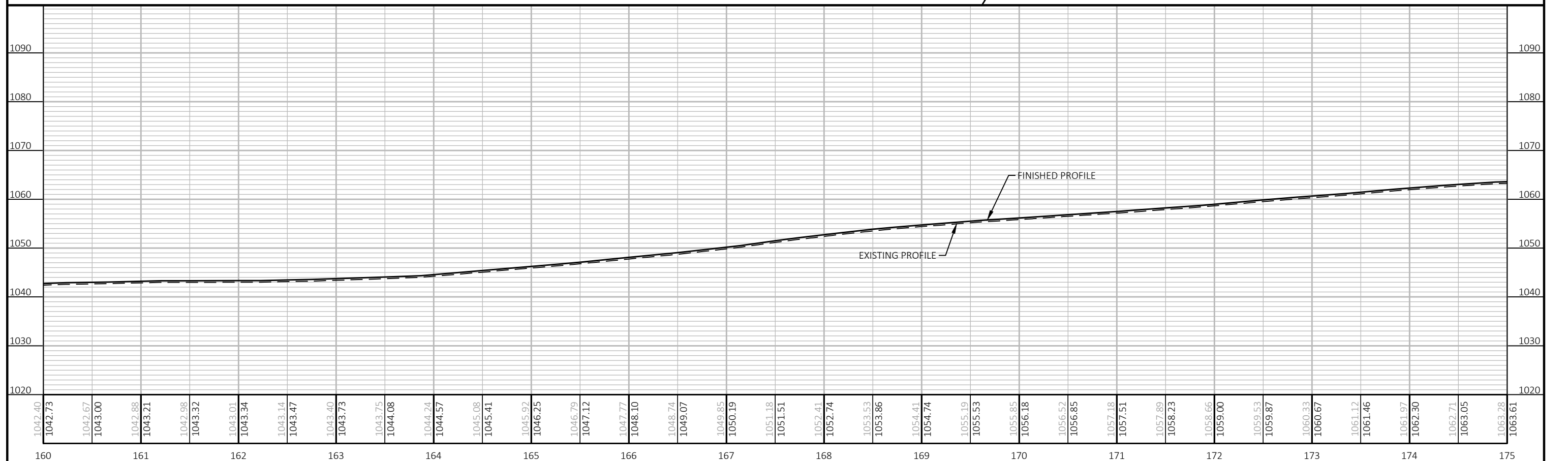
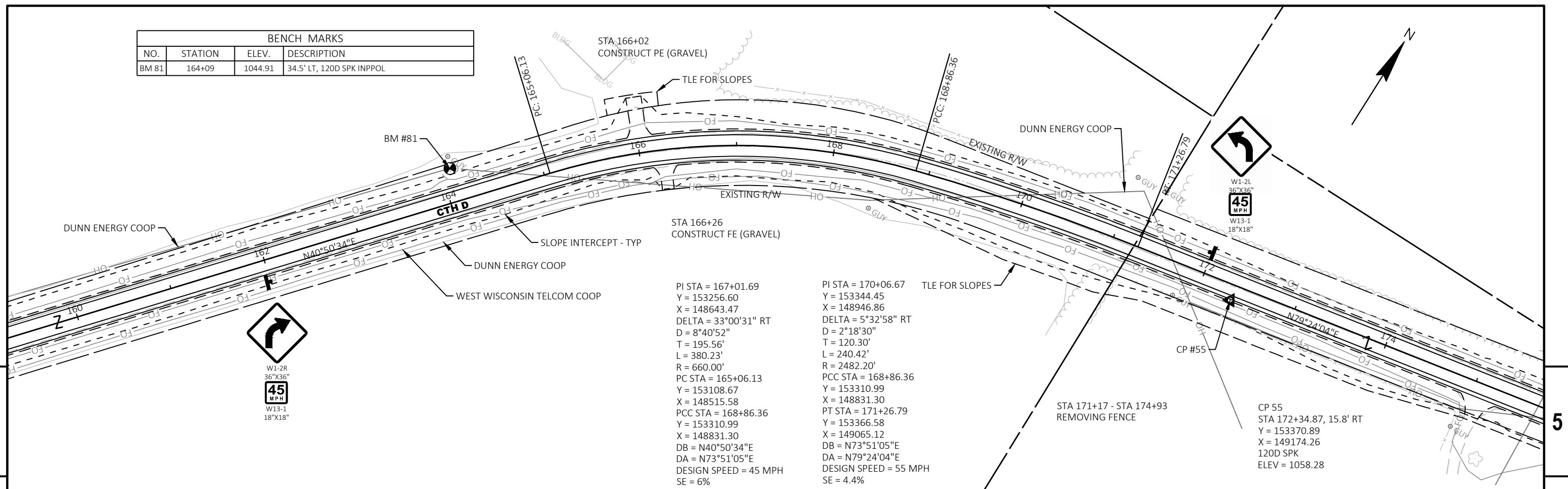


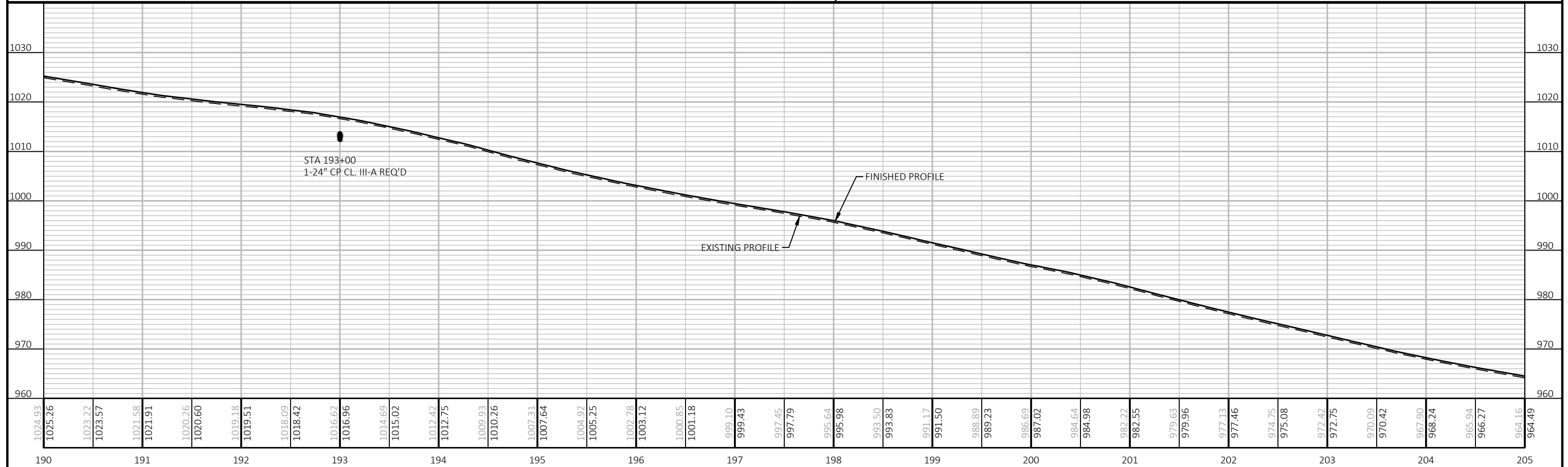
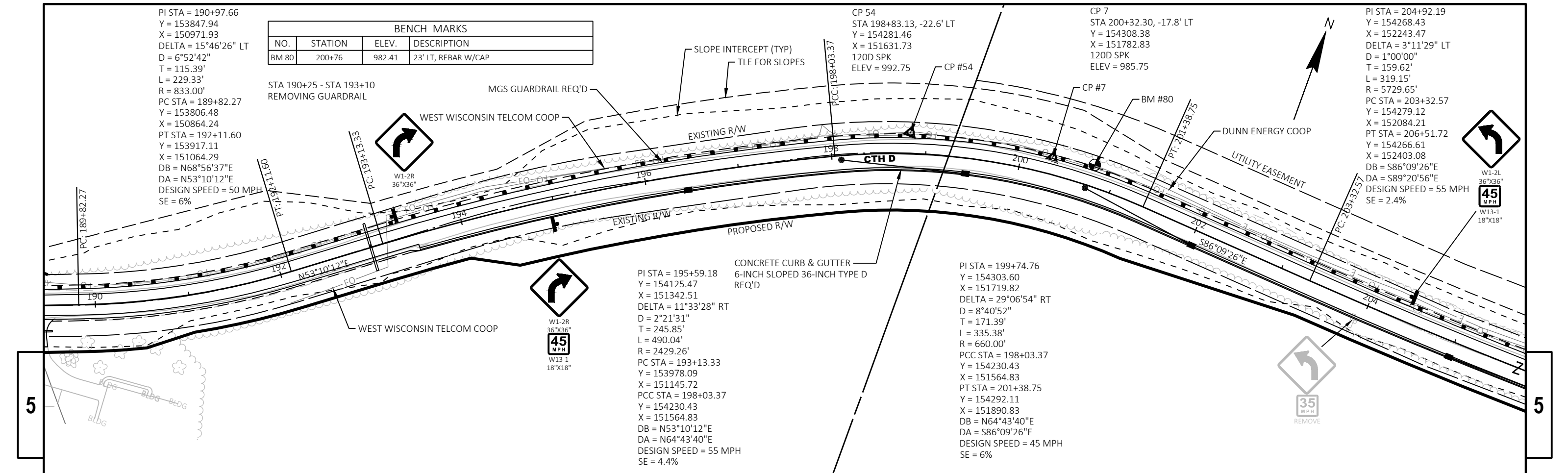
BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM 83	131+42	1042.76	33.6' LT, REBAR W/CAP
BM 82	142+59	1053.39	47.8' LT, 120D SPK IN PPOL

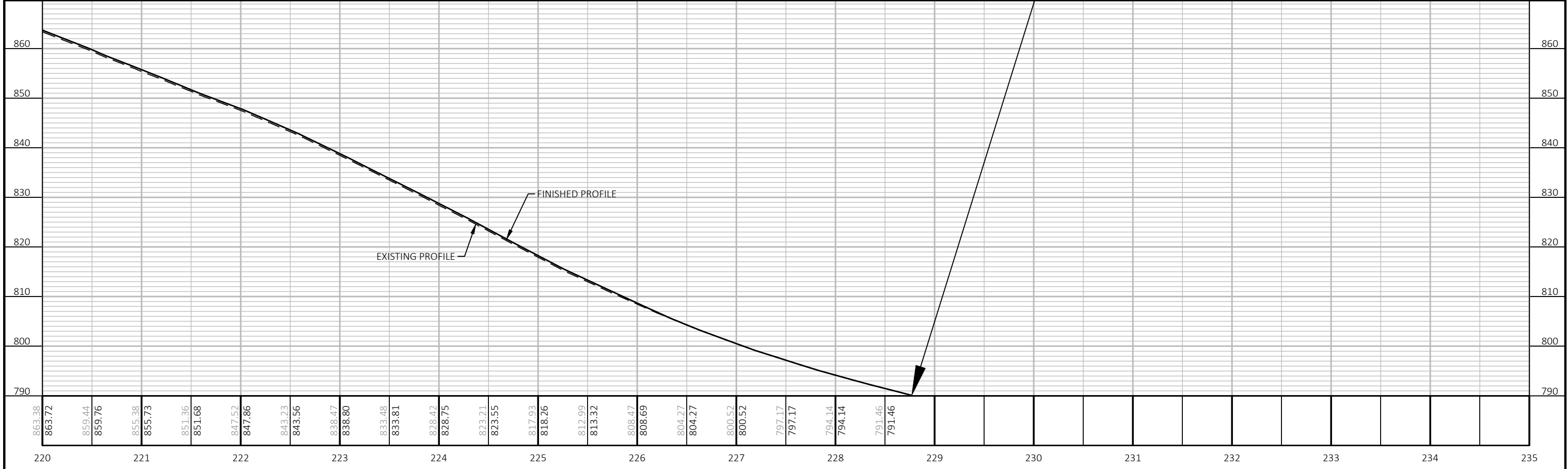
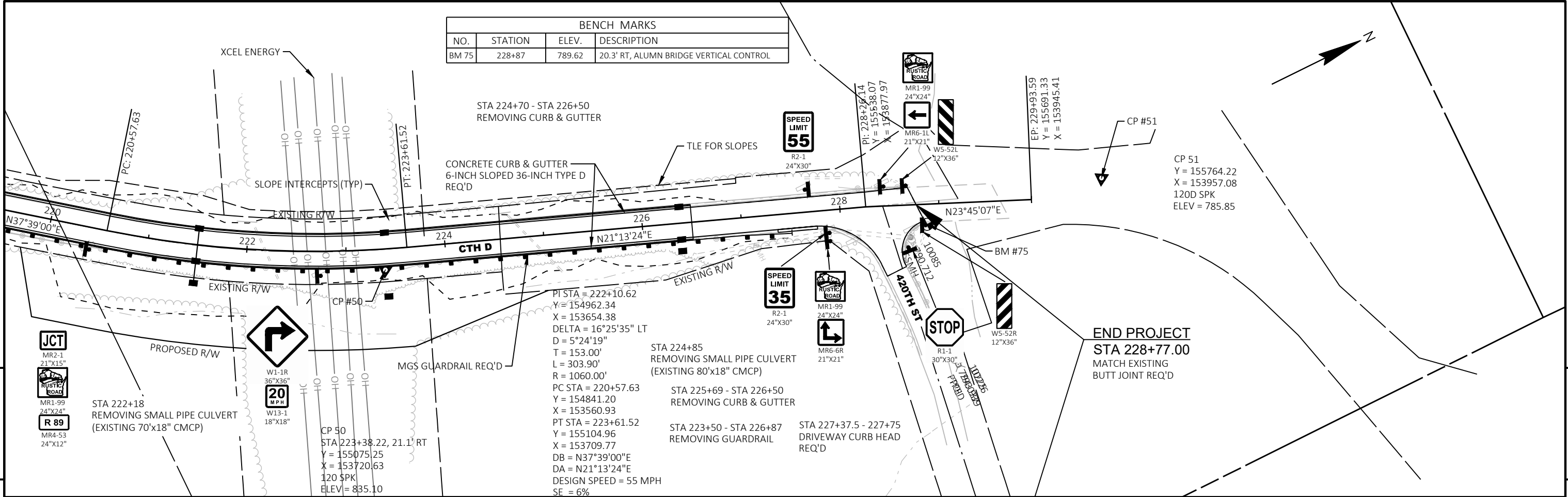




BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM 81	164+09	1044.91	34.5' LT, 120D SPK INPPOL







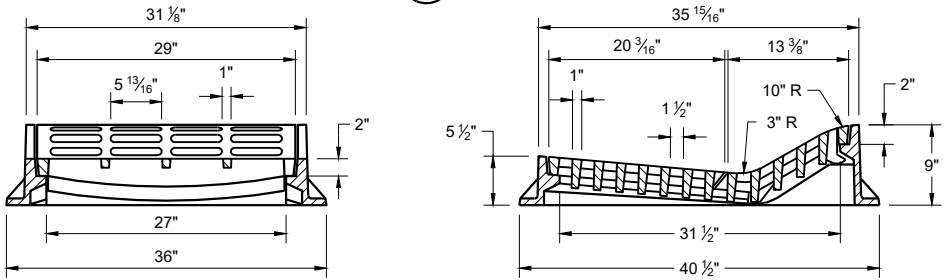
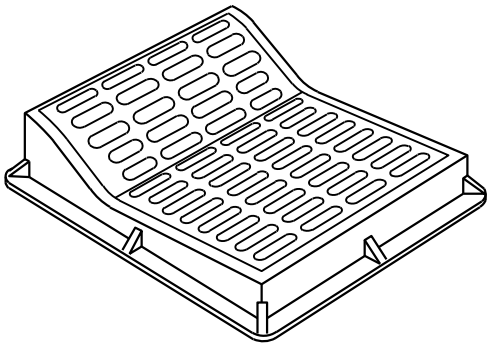
Standard Detail Drawing List

08A05-21C	INLET COVERS TYPE F, HM, HM-S, S, T, HM-GJ & HM-GJ-S
08A05-21D	INLET COVERS TYPE V, V-B, & VV-B
08B09-04	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08C07-03	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT & 2X3.5-FT
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)

GENERAL NOTES

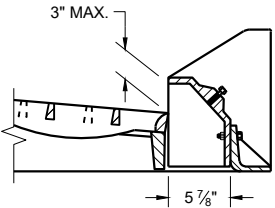
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



TYPE "F"

USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"

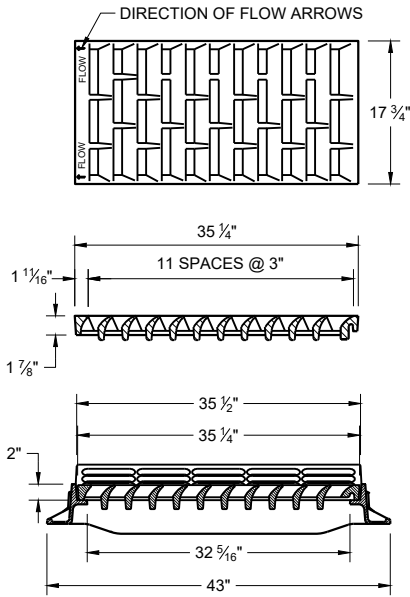


ALTERNATIVE CURB BOX
FOR TYPE "HM" COVER

USE WITH TYPES "G" AND "J" CONCRETE CURB AND GUTTER, 30 INCH
NOTED AS TYP "HM-GJ" ON DRAINAGE TABLE

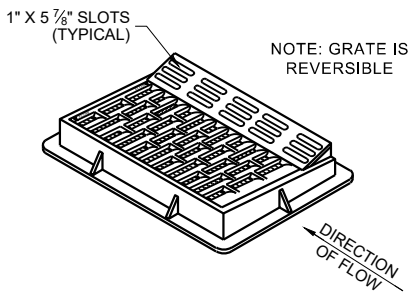
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.

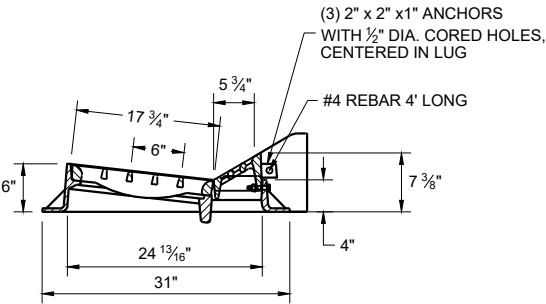


TYPE "HM"

USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"

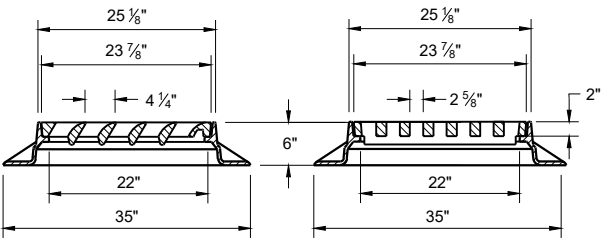
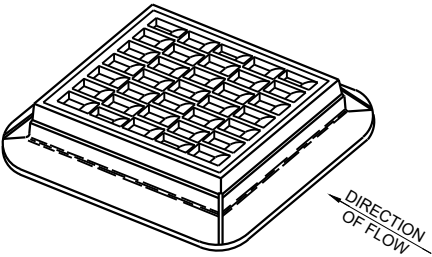


NOTE: GRATE IS REVERSIBLE

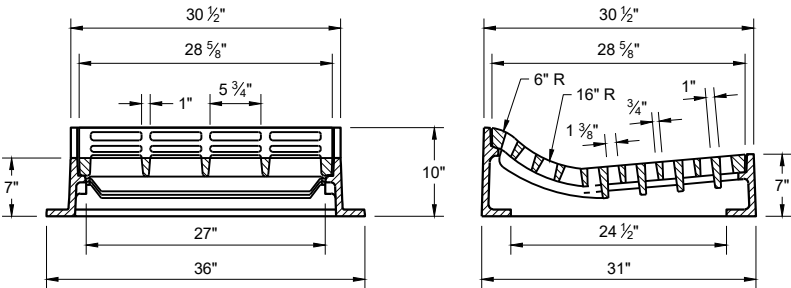
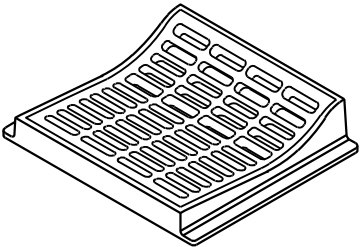


NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.



TYPE "S"



TYPE "T"

USE WITH TYPES "R" AND "T" CONCRETE CURB AND GUTTER, 36"

INLET COVERS
TYPES F, HM, HM-S, S, T,
HM-GJ AND HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

December 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

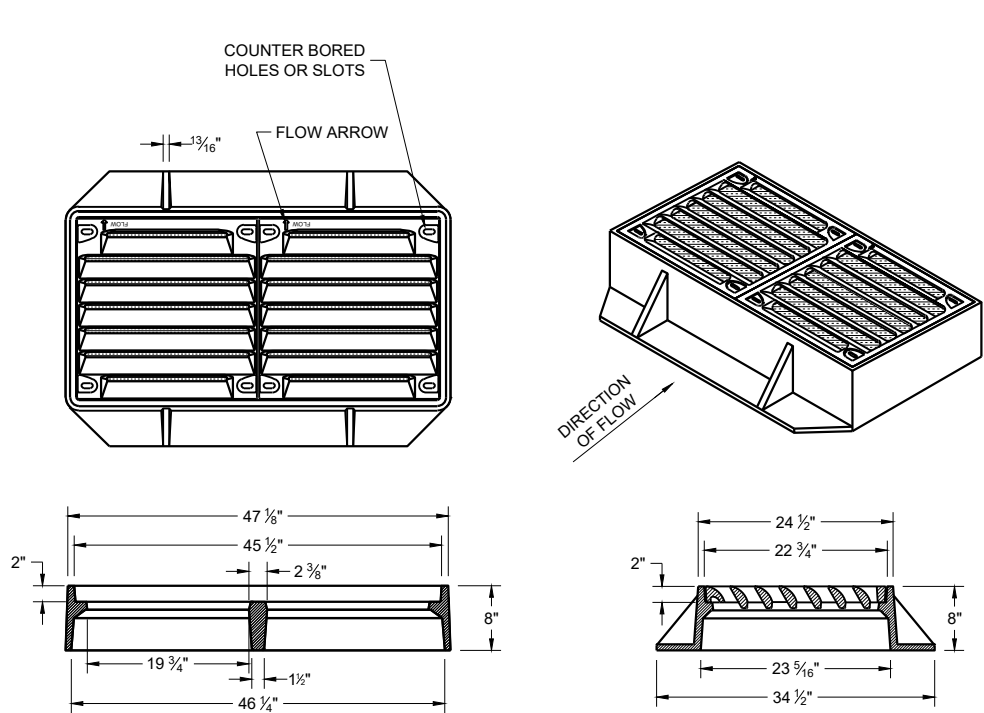
FHWA

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GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

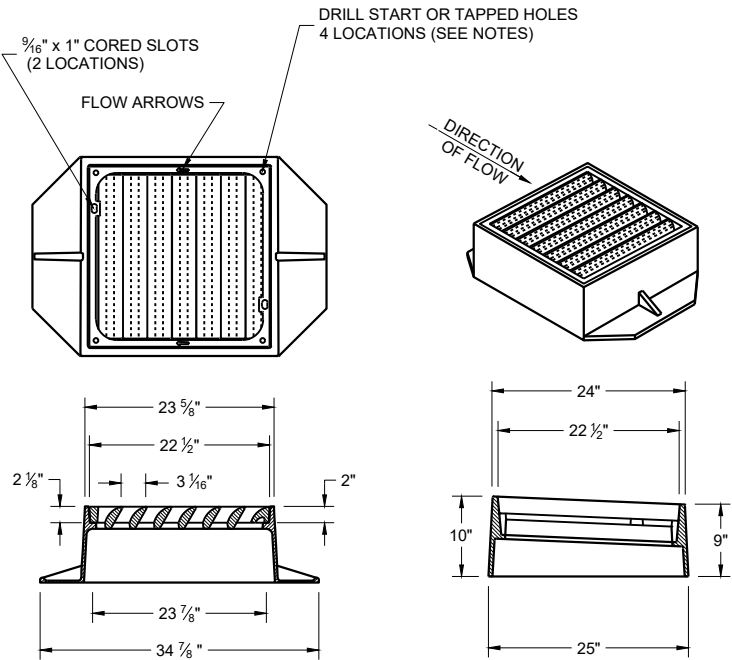
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



TYPE "VV-B"

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER
ALL DRILLING AND TAPPING GRATES AND FRAMES BY
CASTING MANUFACTURER

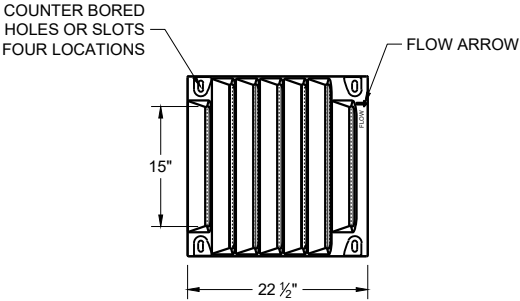
TYPE V
FRAME - CAST GRAY IRON ASTM A48 CLASS 35B
3/8" DIA. X 1/16" DRILL START IN 8 LOCATIONS
GRATE - CAST GRAY IRON ASTM A-48, CLASS 35B



TYPE "V"

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER ALL DRILLING
AND TAPPING GRATES AND FRAMES BY CASTING MANUFACTURER

TYPE V
FRAME - CAST GRAY IRON ASTM A48 CLASS 40A
3/8" DIA. X 1/16" DRILL START IN 4 LOCATIONS
GRATE - CAST GRAY IRON ASTM A-48, CLASS 35B



BOLT DOWN GRATE FOR
TYPE "V" AND "VV-B" COVER

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER
NOTED AS TYPE "V-B" OR "VV-B" (FOR DOUBLE GRATE) ON
DRAINAGE TABLE

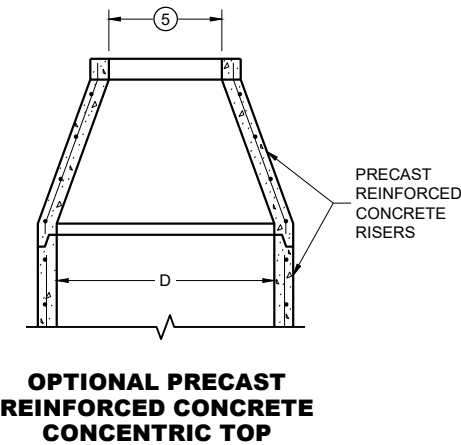
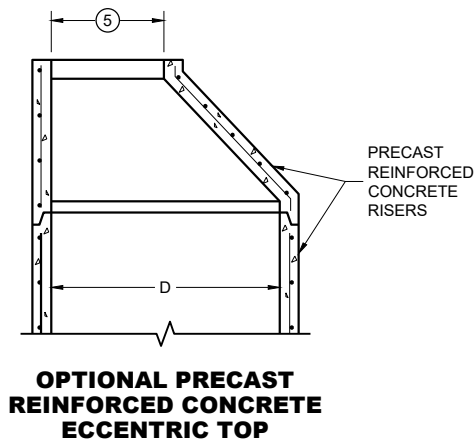
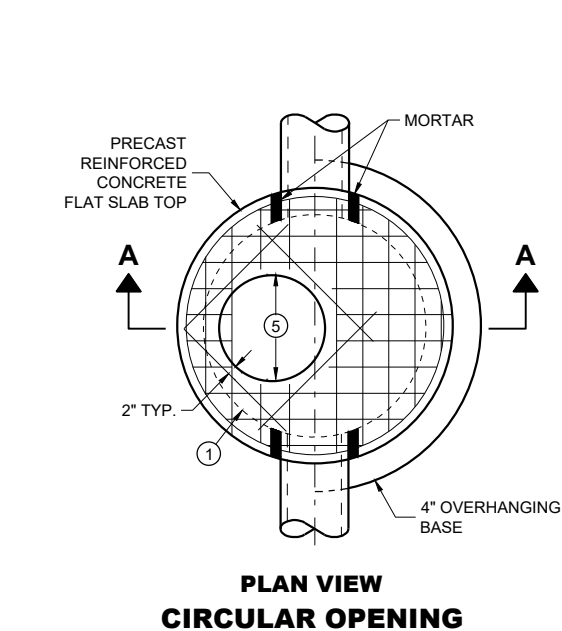
TAP 1/2" -13 HOLES IN FOUR LOCATIONS PER GRATE IN FRAME TO
BOLT GRATE(S).
FRAME - CAST GRAY IRON ASTM A48 CLASS 40A

GRATE - CAST DUCTILE IRON ASTM A536, 55+KSI YIELD
BOLTS - 1/2" -13 STAINLESS STEEL BOLTS WITH WASHERS
TORQUE BOLTS TO MANUFACTURER SPECIFICATION DO NOT
OVERTIGHTEN.

INLET COVERS
TYPES V, V-B, AND VV-B

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR



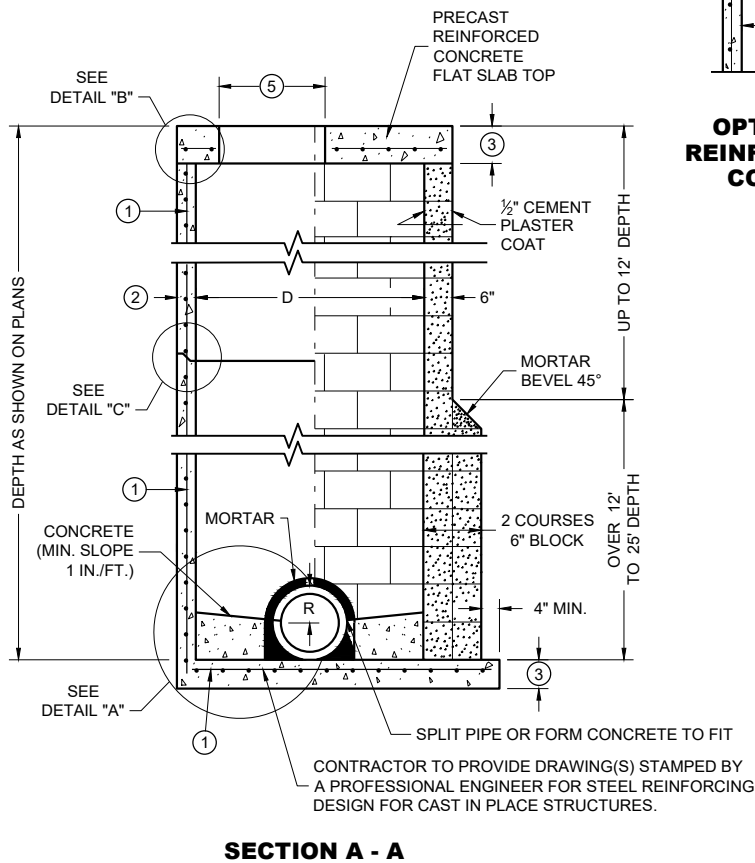
MANHOLE COVER OPENING MATRIX

MANHOLE COVER OPENING SIZE (FT.)	5	C	ALL JS	K	L	M
2 DIA.		X	X		X	
3 DIA.				X		X

PIPE MATRIX

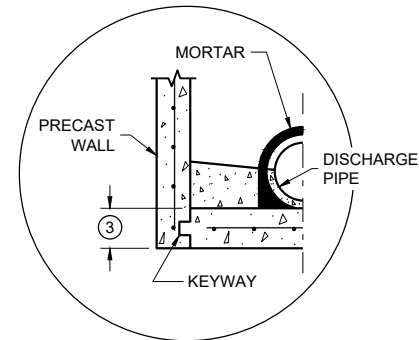
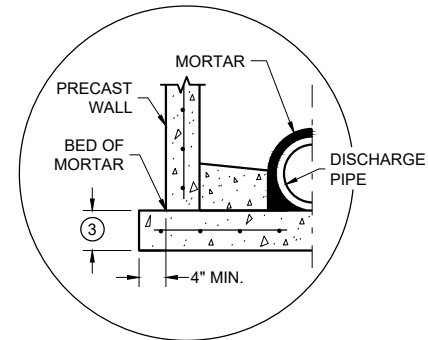
MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42 *	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES.
SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

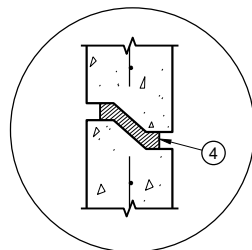
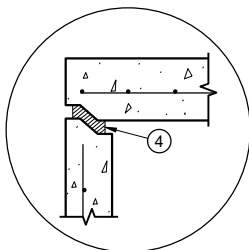
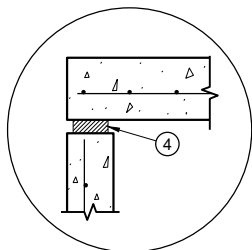


**PRECAST REINFORCED
CONCRETE WITH
MONOLITHIC BASE**

**CONCRETE BLOCK WITH
CAST IN PLACE OR
PRECAST REINFORCED
CONCRETE BASE**

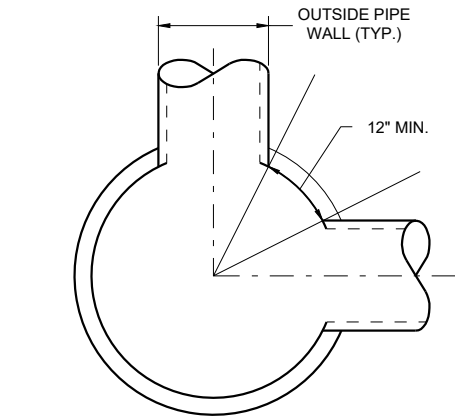


DETAIL "A"



DETAIL "B"

DETAIL "C"



DETAIL "D"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL IMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF 1/2 INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

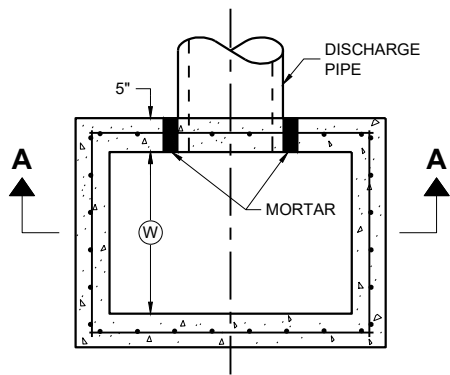
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

- 1 FOR PRECAST MANHOLES AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.
- 2 SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES
- 3 SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.
- 4 JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.
- 5 SEE MANHOLE COVER OPENING MATRIX.

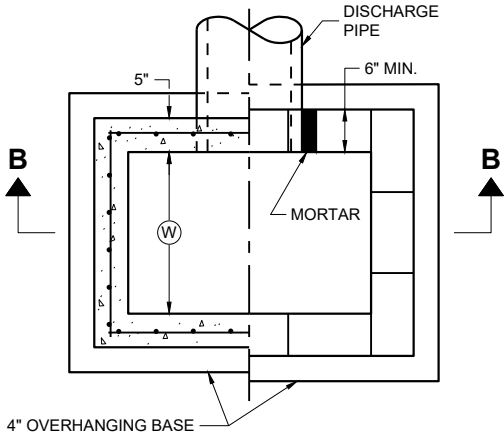
**MANHOLES, 3-FT, 4-FT
5-FT, 6-FT, 7-FT, 8-FT, 9-FT
AND 10-FT DIAMETER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

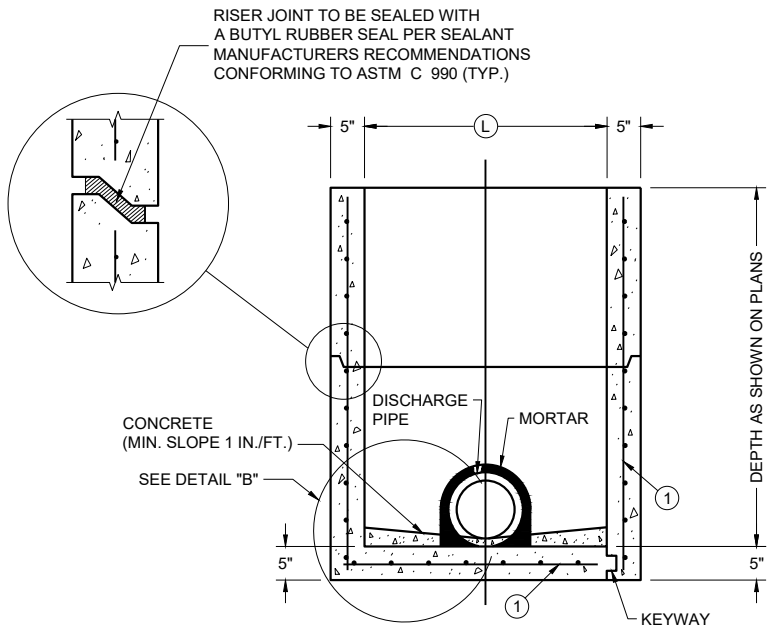
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DATE ROADWAY STANDARDS DEVELOPMENT
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PLAN VIEW



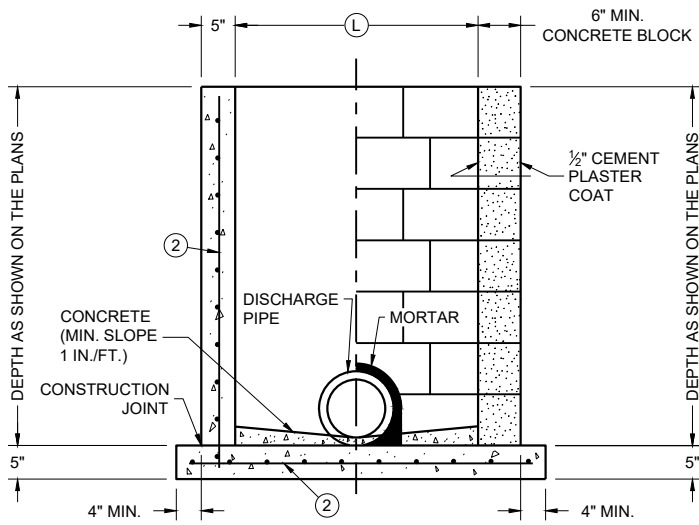
PLAN VIEW



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

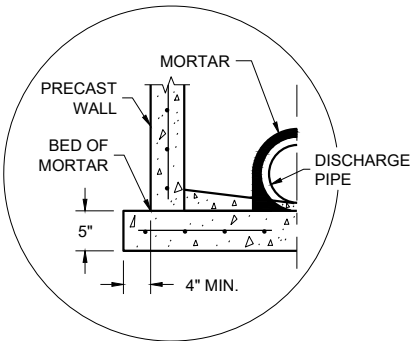
SECTION A - A



CAST IN PLACE REINFORCED CONCRETE

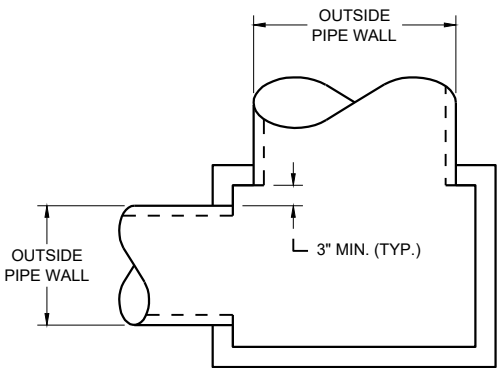
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE ①

SECTION B - B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "B"



DETAIL "A"

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2X3.5-FT

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

- ① FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913
- ② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

CATCH BASIN COVER MATRIX

INLET SIZE	WIDTH (W) (FT.)	LENGTH (L) (FT.)	INLET COVER TYPE									
			ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM	V V-B
2 X 2-FT	2	2	X	X				X				
2 X 2.5-FT	2	2.5			X			X	X	X	X	
2 X 3-FT	2	3					X					
2.5 X 3-FT	2.5	3				X						
2 X 3.5-FT	2	3.5										X

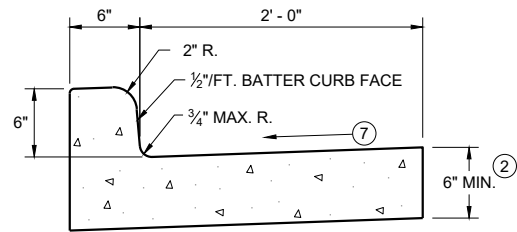
PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2 X 2-FT	12	12
2 X 2.5-FT	12	18
2 X 3-FT	12	24
2.5 X 3-FT	18	24
2 X 3.5-FT	12	30

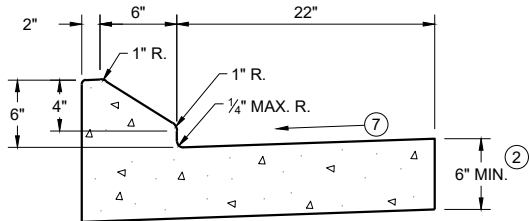
INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2 X 3.5-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

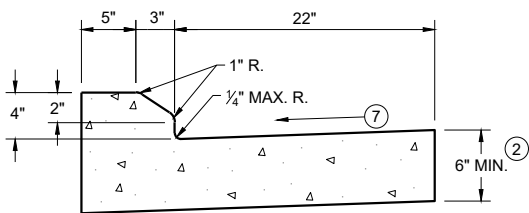
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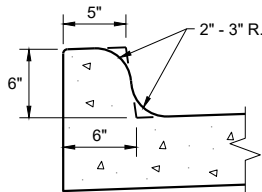
TYPES A^① & D



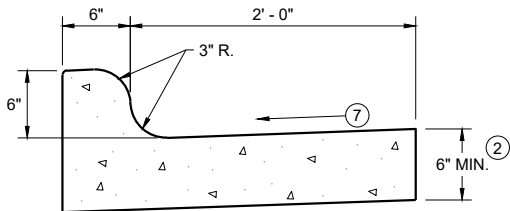
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

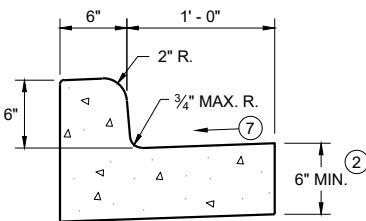


TYPES K^① & L
(OPTIONAL CURB SHAPE)



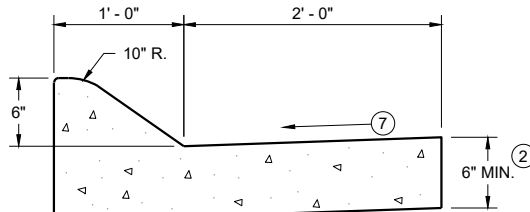
TYPES K^① & L

CONCRETE CURB AND GUTTER 30"

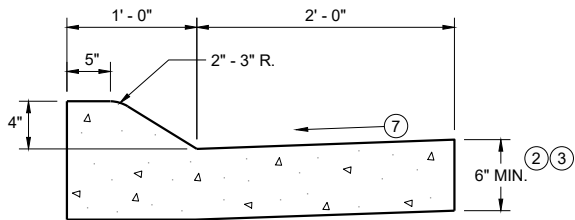


TYPES A^① & D

CONCRETE CURB AND GUTTER 18"

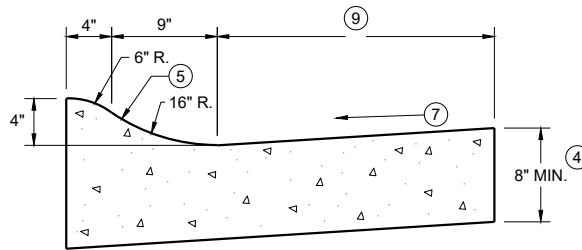


6" SLOPED CURB TYPES A^① & D



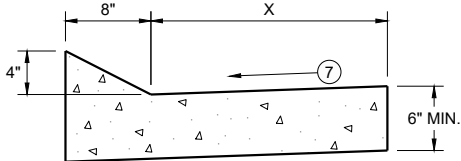
4" SLOPED CURB TYPES A^① & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R^① & T

TBT & TBTT	X
30"	22"
36"	28"

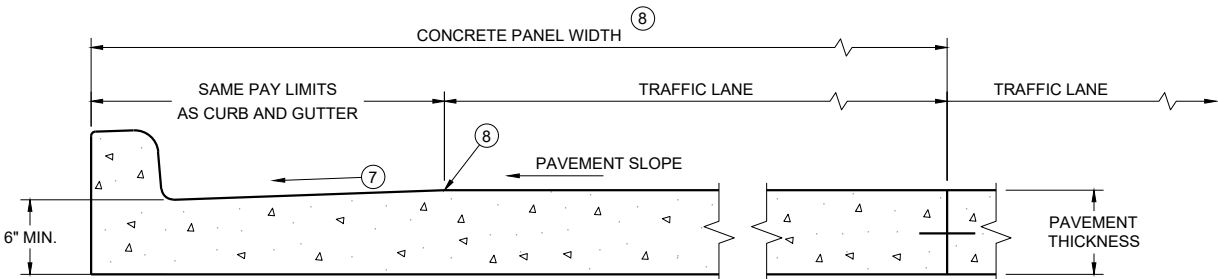


TYPES TBT & TBTT^①

CONCRETE CURB AND GUTTER

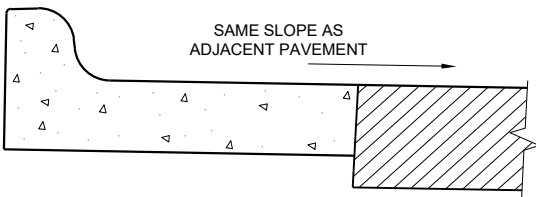
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB AND GUTTER *

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER^⑥
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

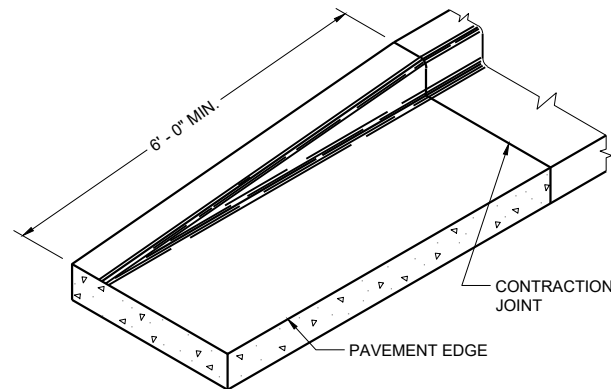
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

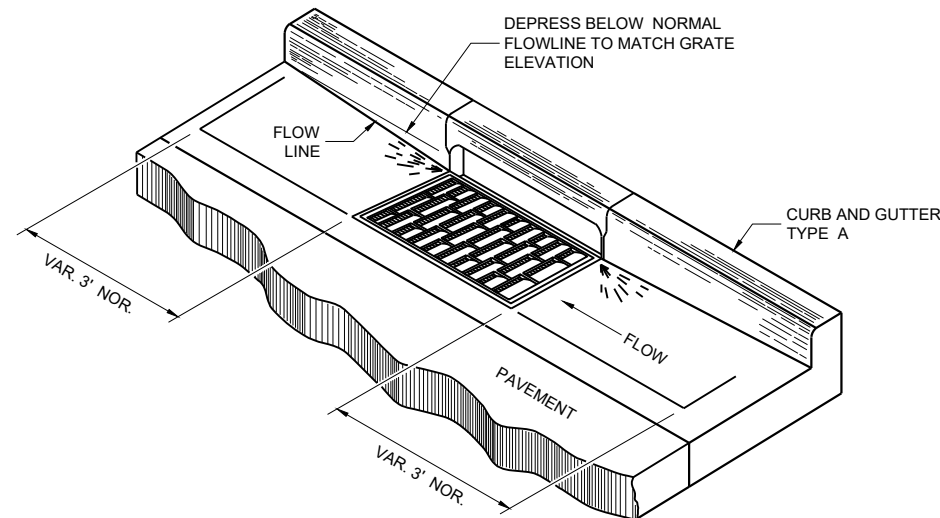
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- ④ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑤ UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
- ⑦ USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
- ⑧ INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.
- ⑨ CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

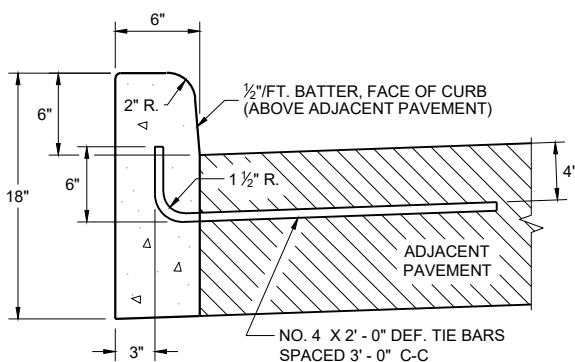


END SECTION CURB AND GUTTER

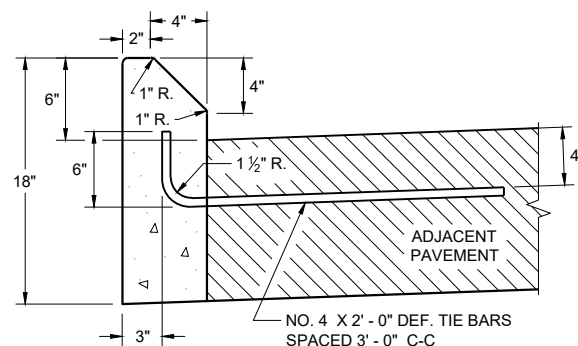


DETAIL OF CURB AND GUTTER AT INLETS

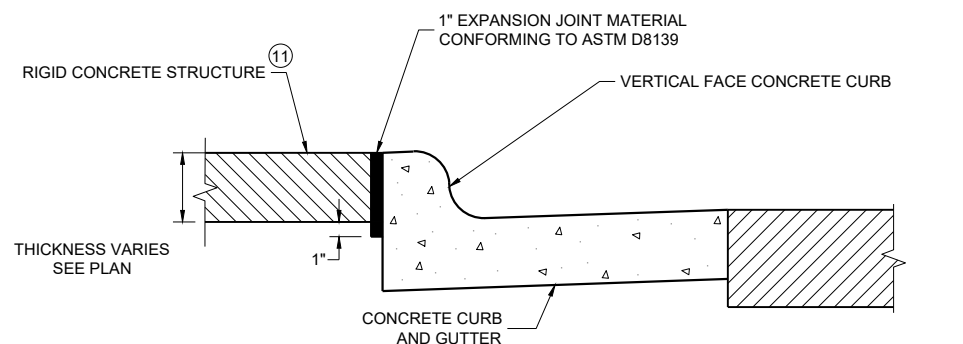
(TYPICAL H INLET COVER SHOWN)



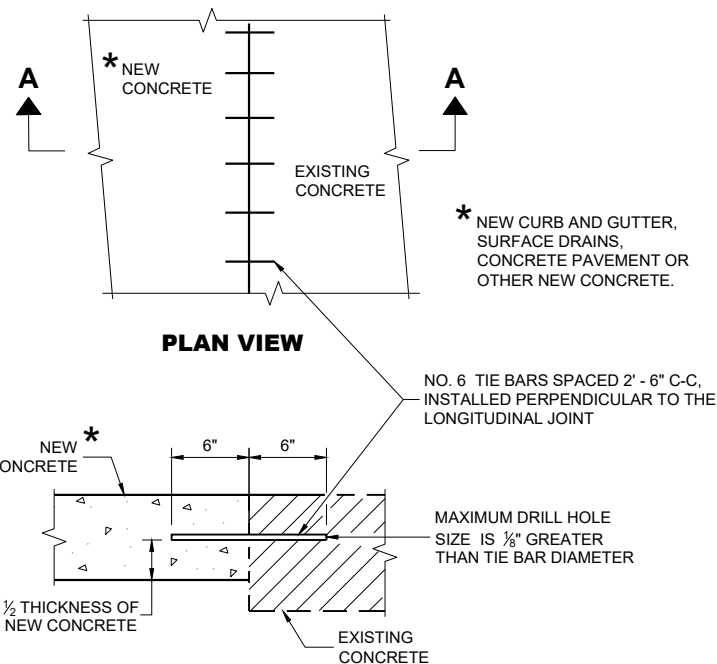
TYPES A^① & D



**TYPES G^① & J
CONCRETE CURB**



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE^⑪



**SECTION A - A
TIE BARS DRILLED INTO EXISTING PAVEMENT**

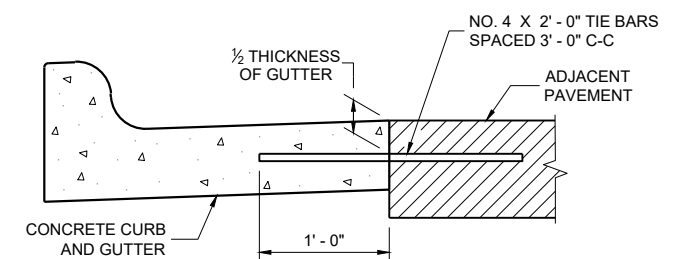
GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

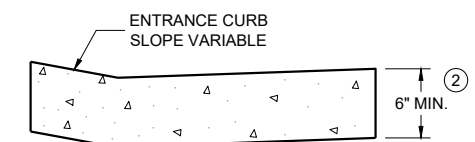
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑩ REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.
- ⑪ PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.



TYPICAL TIE BAR LOCATION^①

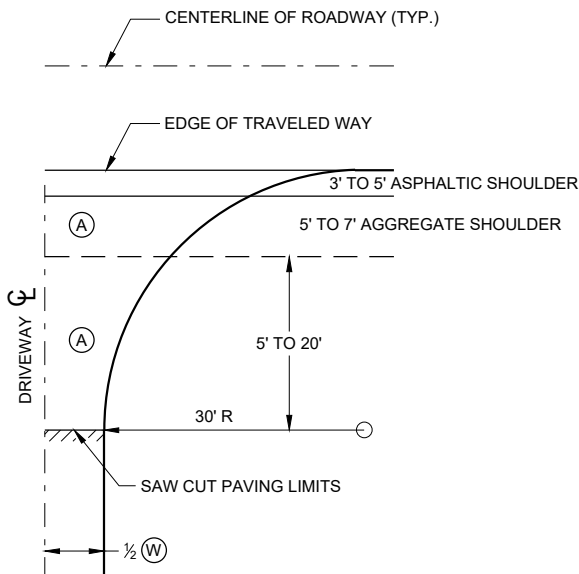


**DRIVEWAY ENTRANCE CURB^⑩
(WHEN DIRECTED BY THE ENGINEER)**

**CONCRETE CURB, TIES
AND CURB AND GUTTER
APPLICATIONS**

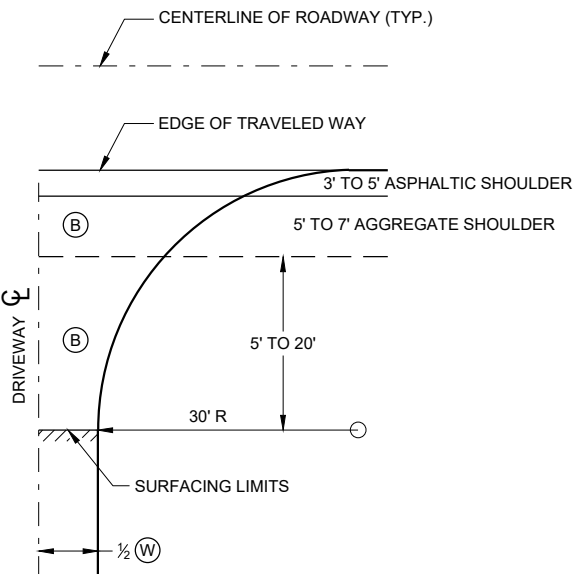
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR

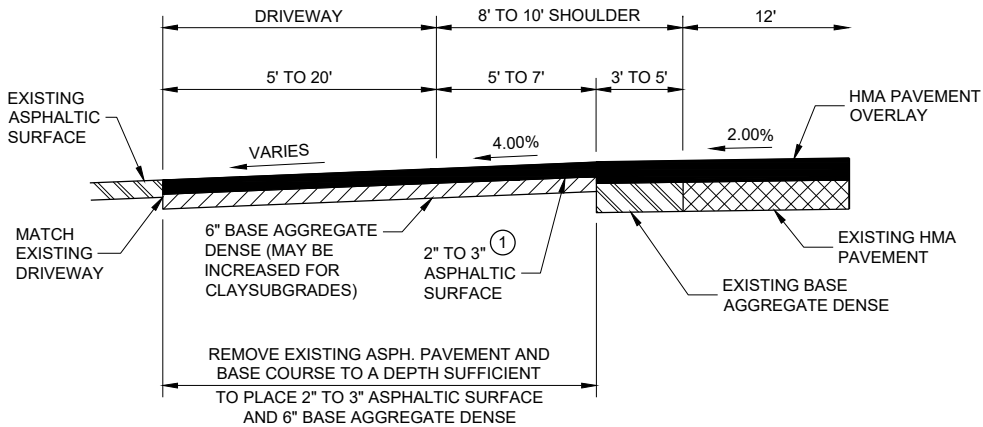


**PLAN VIEW
HALF SECTION**

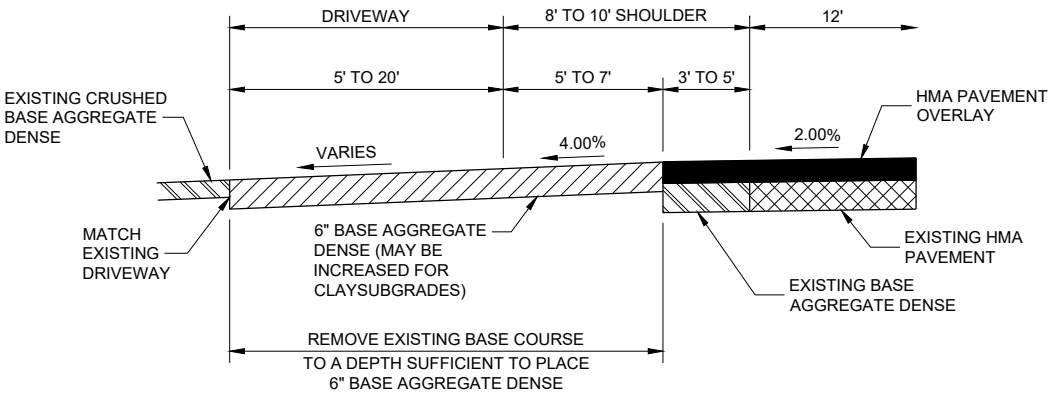
- (A) : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES. (TON)
- (B) : PAID FOR AS BASE AGGREGATE DENSE 1 1/4" (TON)
- (W) : DRIVEWAY WIDTH 16' MIN. - 24' MAX.



**PLAN VIEW
HALF SECTION**



**PROFILE VIEW
RURAL ENTRANCE
WITH ASPHALTIC SURFACE
RESURFACING PROJECTS**



**PROFILE VIEW
RURAL ENTRANCE
WITH AGGREGATE SURFACE
6" BASE AGGREGATE DENSE
RESURFACING PROJECTS**

GENERAL NOTES

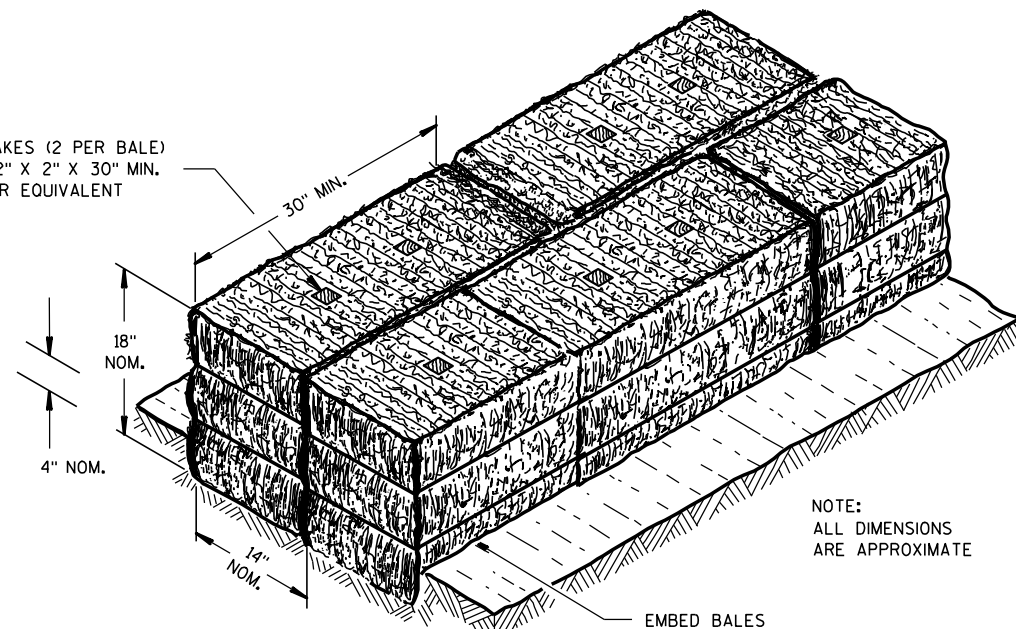
- ① DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS
BASED ON TYPE OF USAGE AND LOADINGS.

**DRIVEWAYS WITHOUT CURB
AND GUTTER RESURFACING
PROJECTS RURAL**

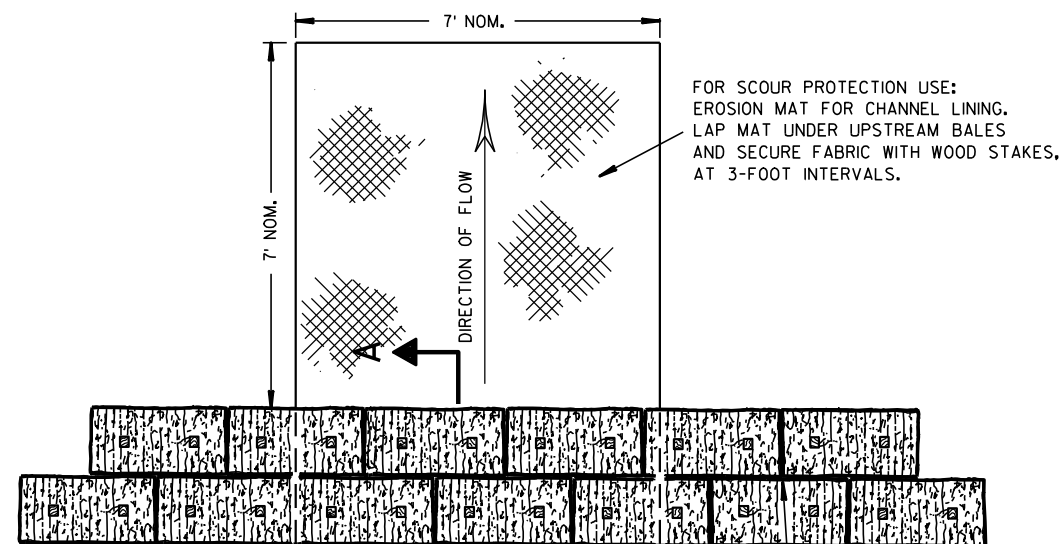
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER 56
FHWA

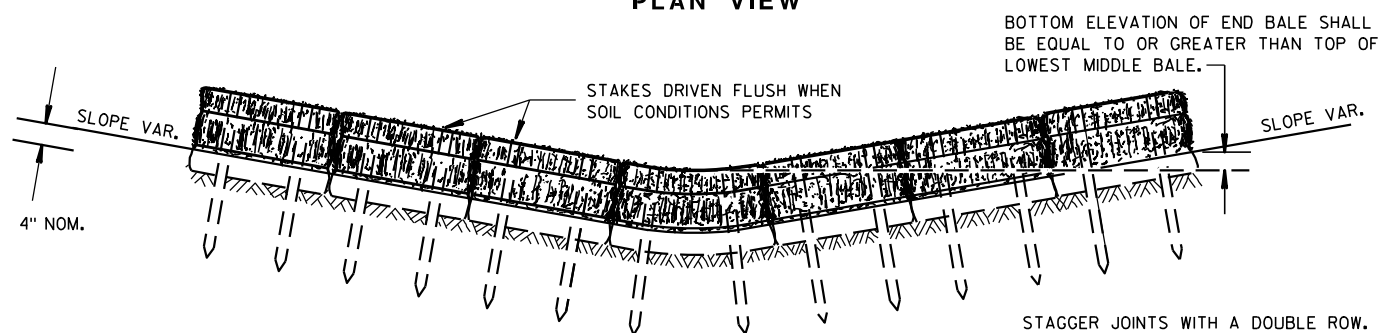
WOOD STAKES (2 PER BALE)
NOMINAL 2" X 2" X 30" MIN.
LENGTH OR EQUIVALENT



SECTION A-A



PLAN VIEW



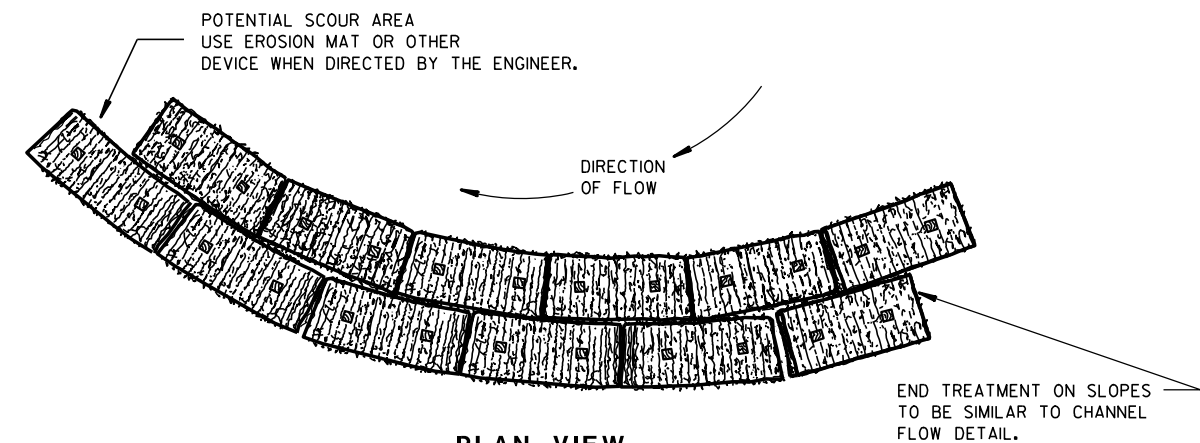
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

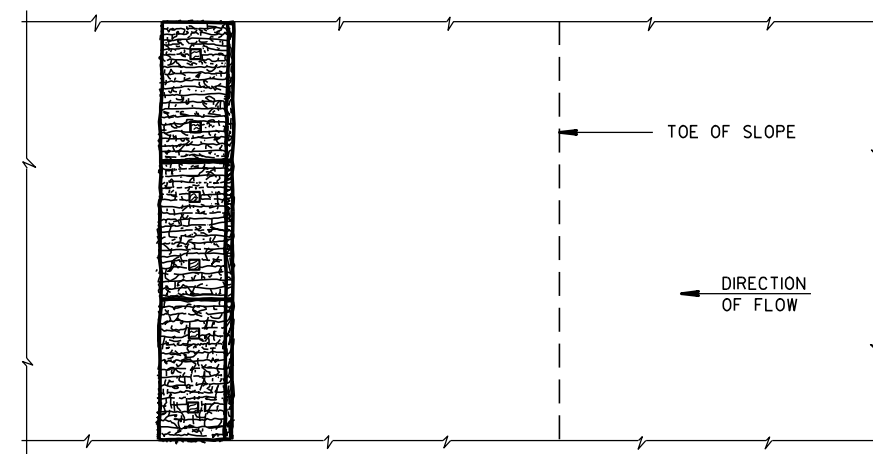
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- ① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

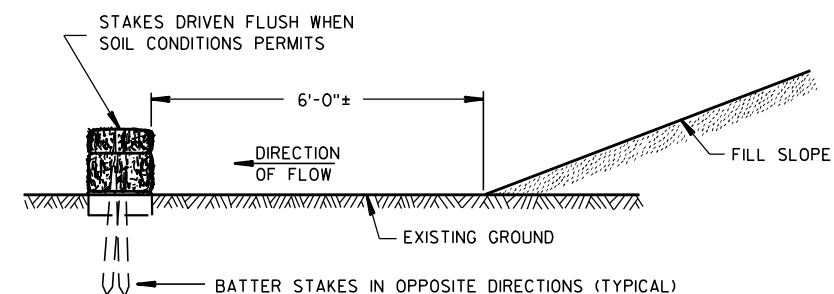


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

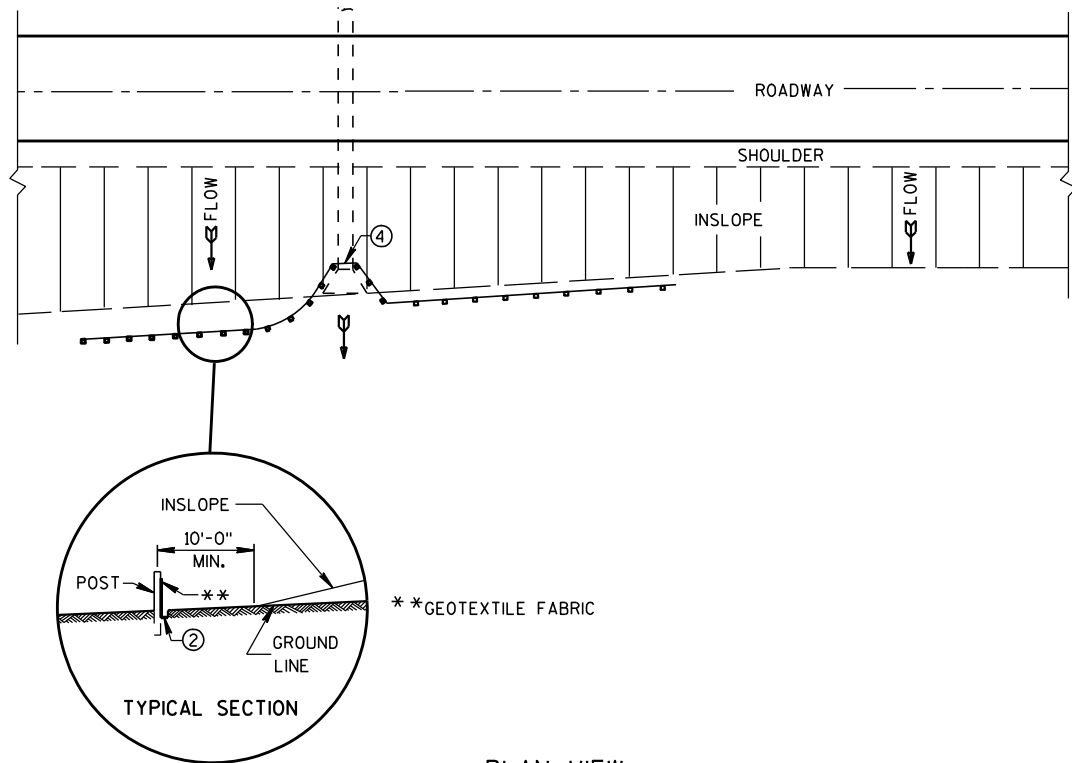
6/04/02
DATE

FHWA

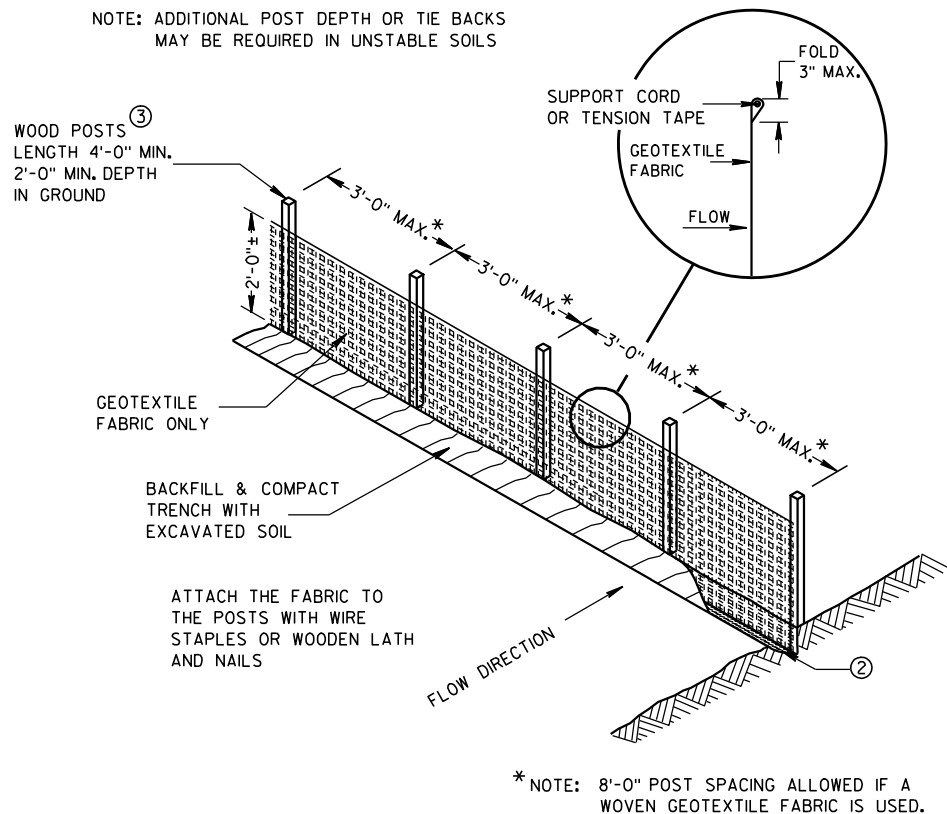
/S/ Beth Connolly

CHIEF ROADWAY DEVELOPER

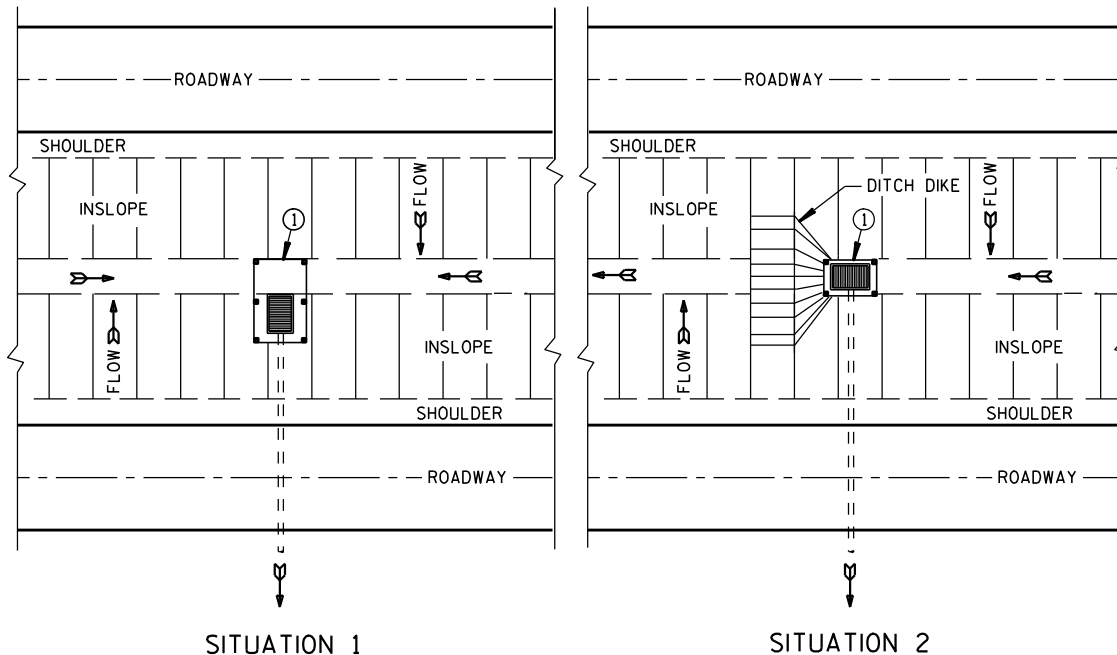
ENGINEER



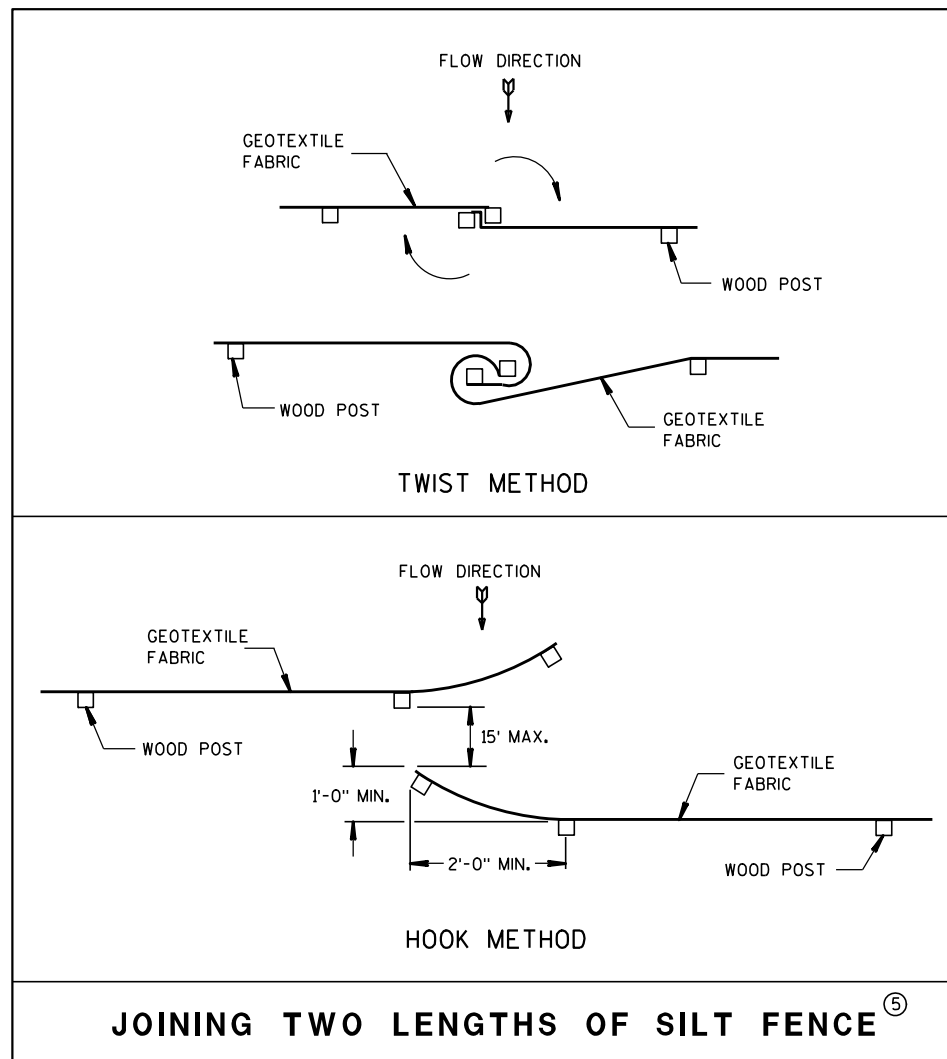
PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE



SILT FENCE



PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

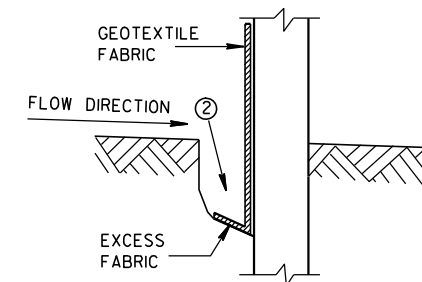


JOINING TWO LENGTHS OF SILT FENCE ⑤

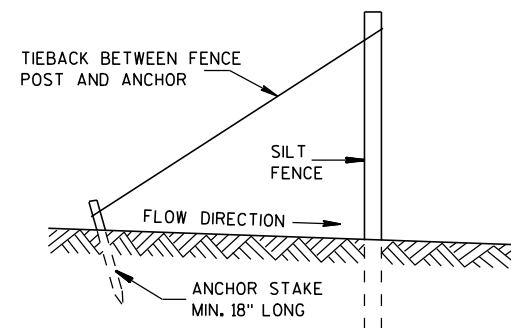
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

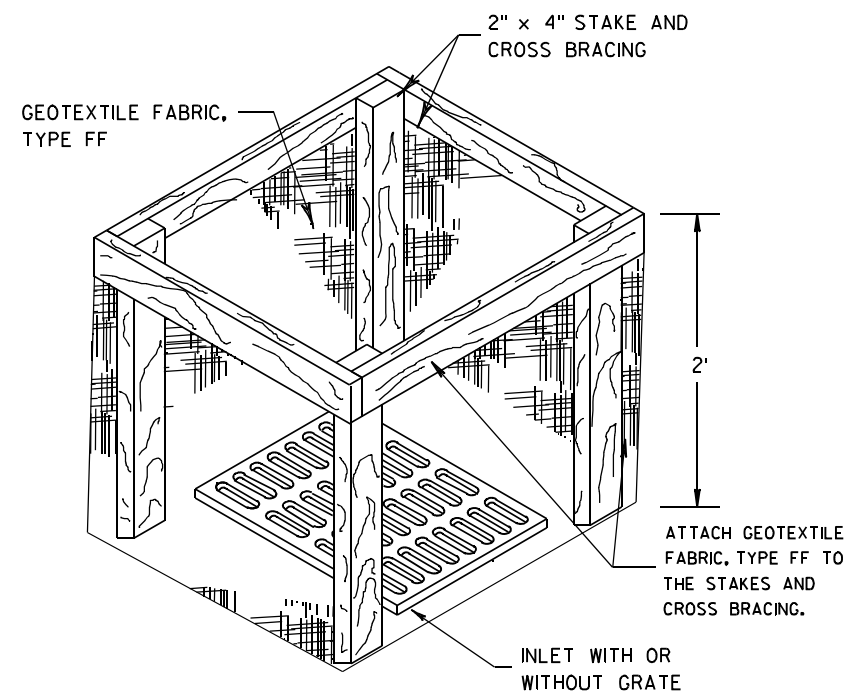
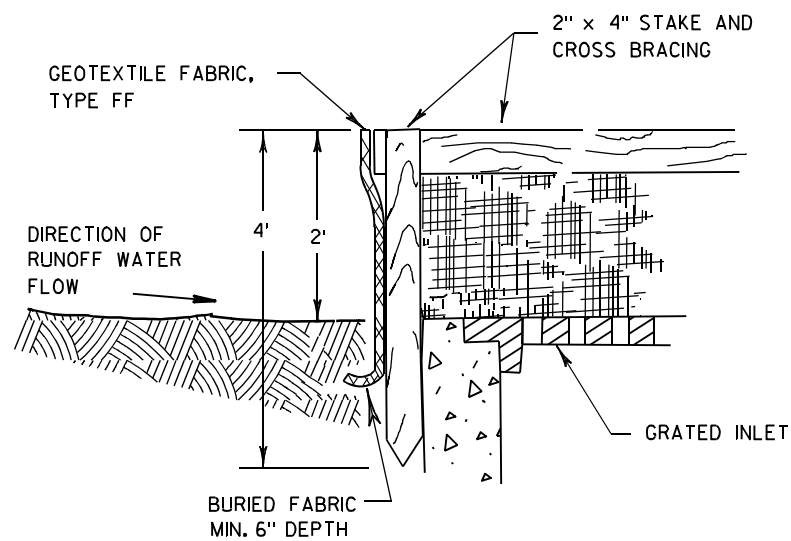


TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 DATE	/S/ Beth Conn CHIEF ROADWAY DEVELOPER
FHWA	58 ENGINEER



INLET PROTECTION, TYPE A

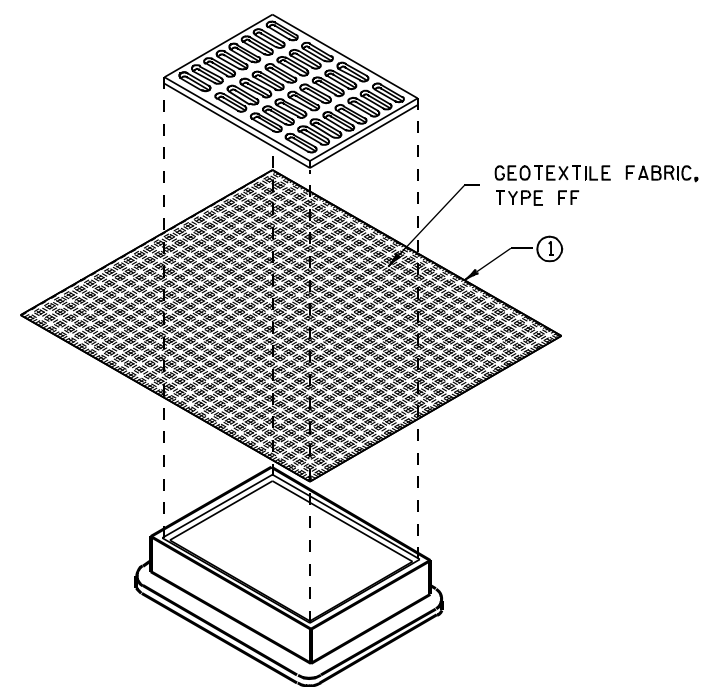
GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

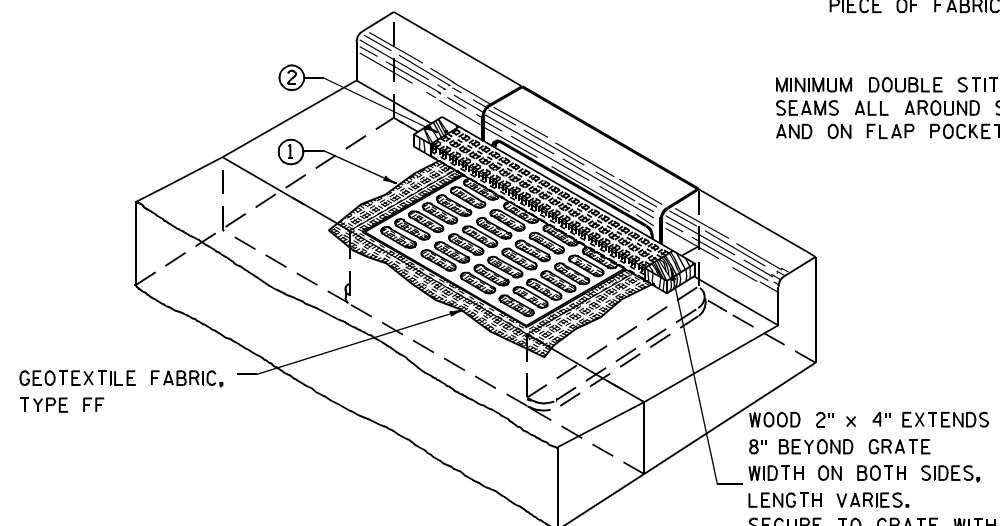
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- ① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- ③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

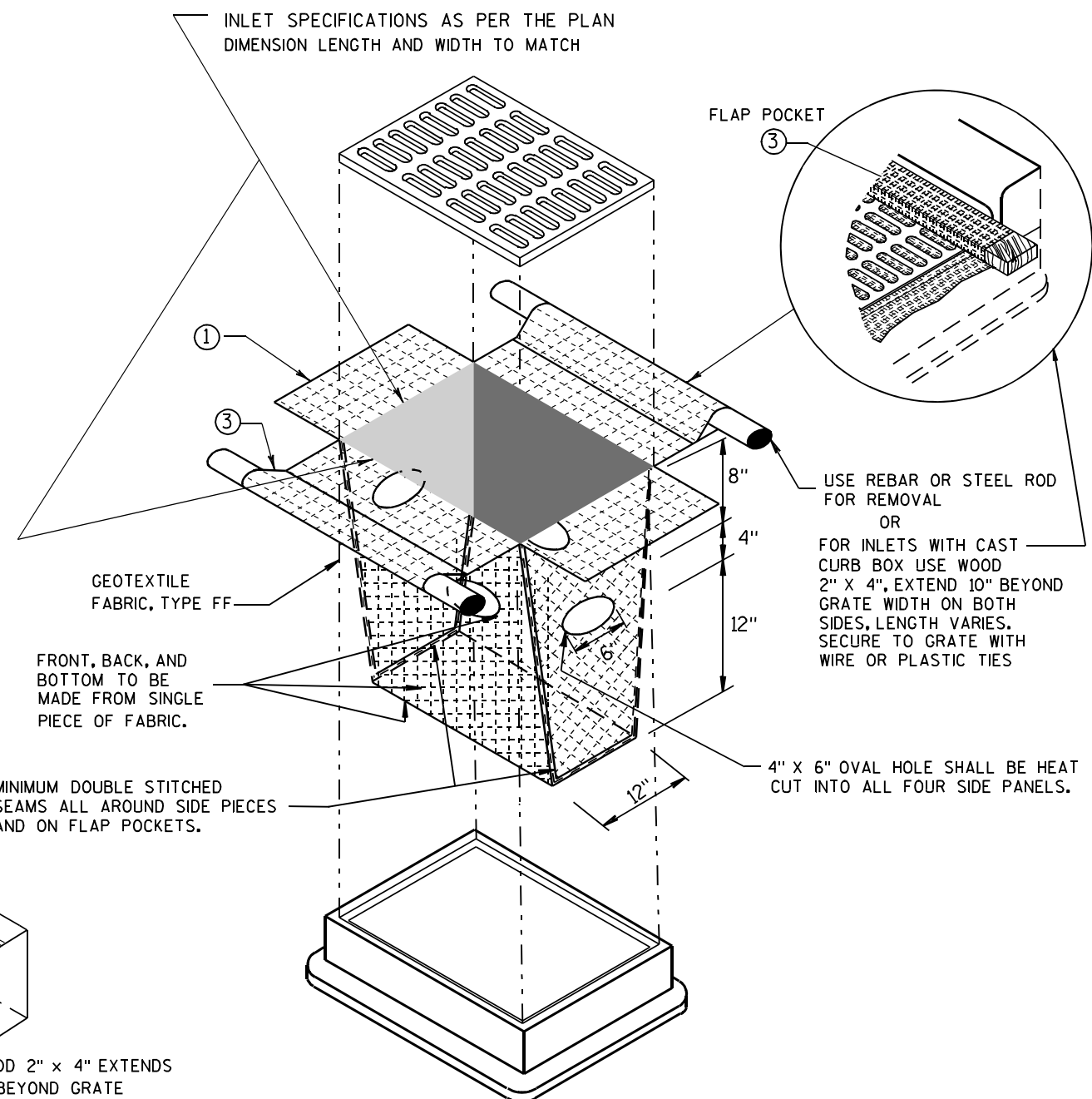
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.



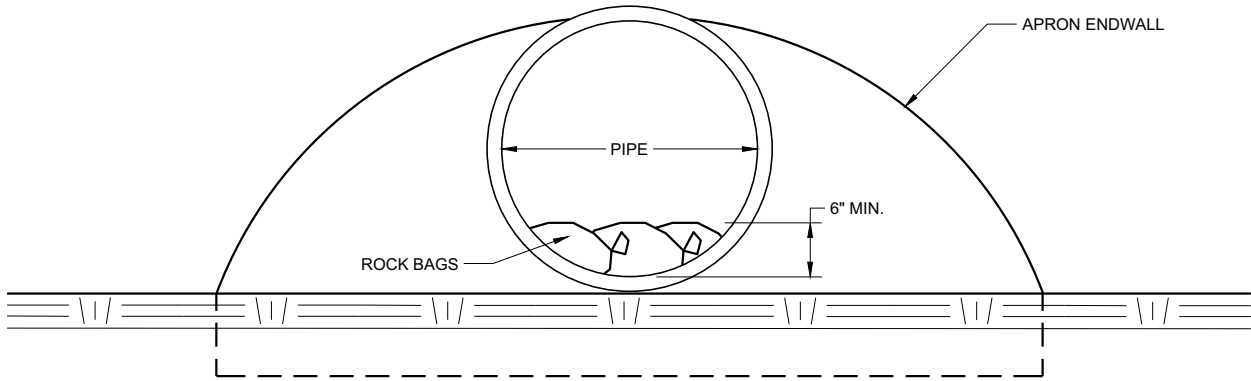
INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

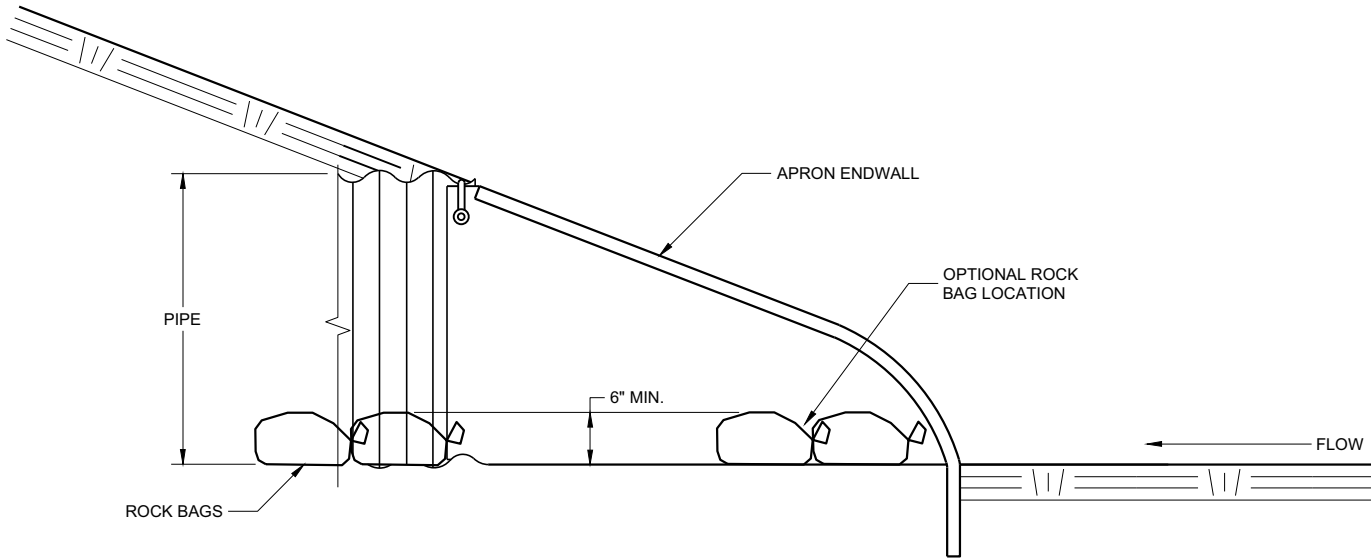
**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Connolly
DATE 59
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER



END VIEW



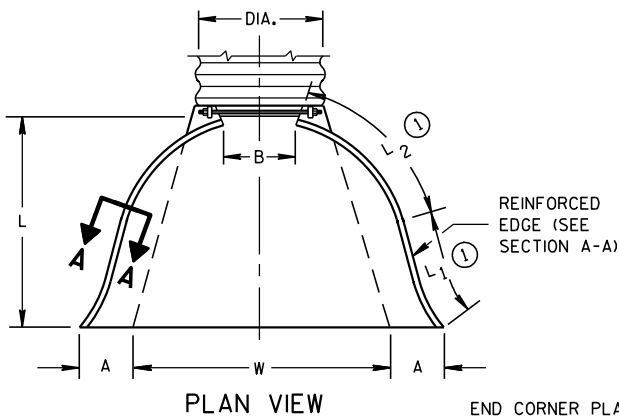
SIDE VIEW

CULVERT PIPE CHECK
(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED May 2019 DATE	/S/ Daniel Schave	-
FHWA	EROSION CONTROL ENGI	60

METAL APRON ENDWALLS												
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE		BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")			
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1		1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1		1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1		1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1		1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1		1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1		1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1		2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1		2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1		3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1		3 Pc.
60	.109x	.105x	18	33	12	87	—	—	114	2 to 1		3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1		3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1		3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1		3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1		3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1		3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1		3 Pc.

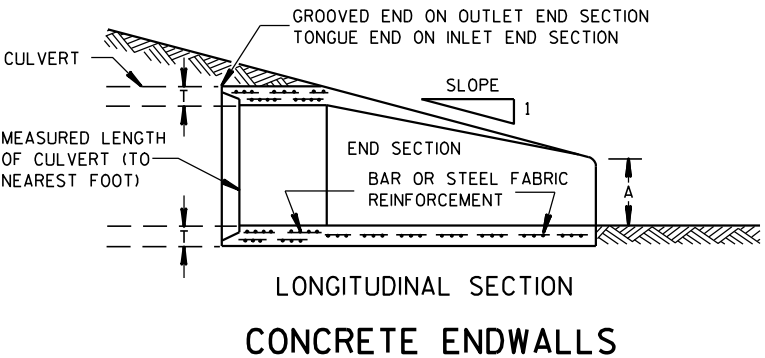
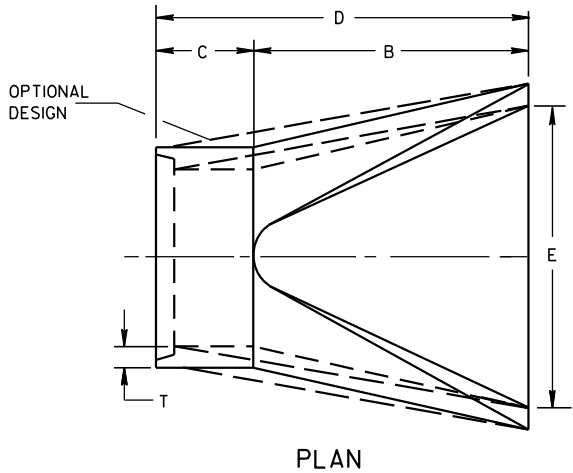
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



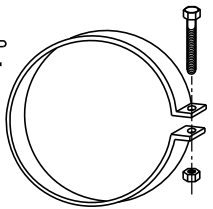
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

REINFORCED CONCRETE APRON ENDWALLS												
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE				
	T	A	B	C	D	E	G					
12	2	4	24	48 7/8	72 7/8	24	2	3 to 1				
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1				
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1				
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1				
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1				
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1				
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1				
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1				
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1				
48	5	24	72	26	98	84	5	3 to 1				
54	5 1/2	27	65	33 1/4-35	98 1/4-100	90	5 1/2	2 2/5 to 1				
60	6	30-35	60	39	99	96	5	2 to 1				
66	6 1/2	24-30	72-78	21-27	99	102	5 1/2	2 to 1				
72	7	24-36	78	21	99	108	6	2 to 1				
78	7 1/2	24-36	78	21	99	114	6 1/2	2 to 1				
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1				
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1				

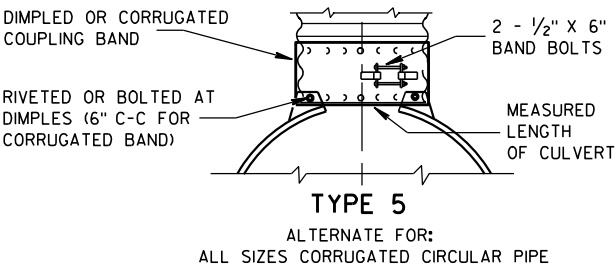
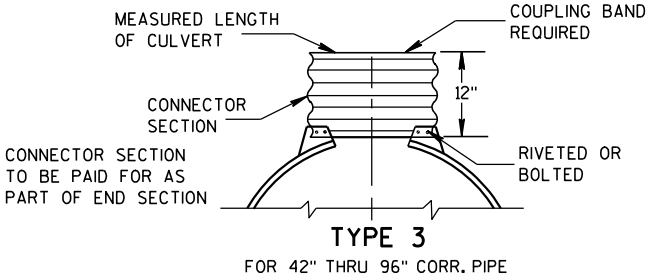
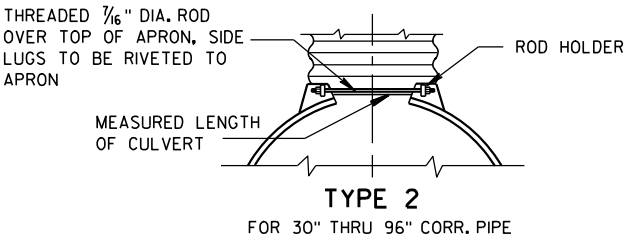
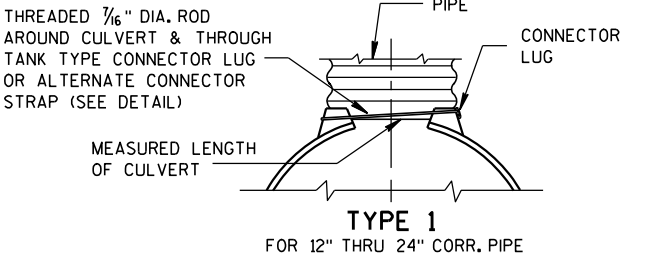
* MINIMUM
** MAXIMUM



1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



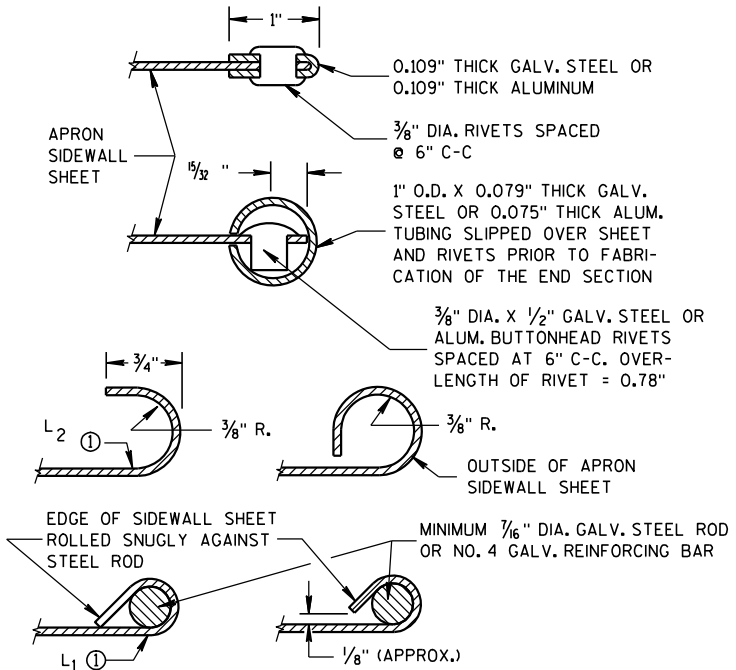
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

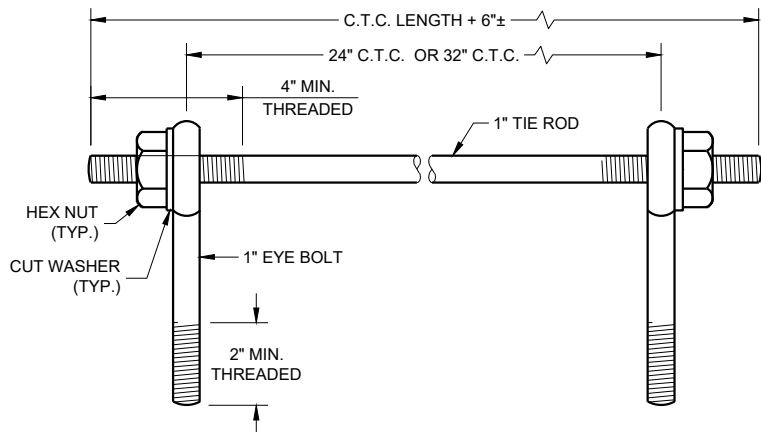
ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

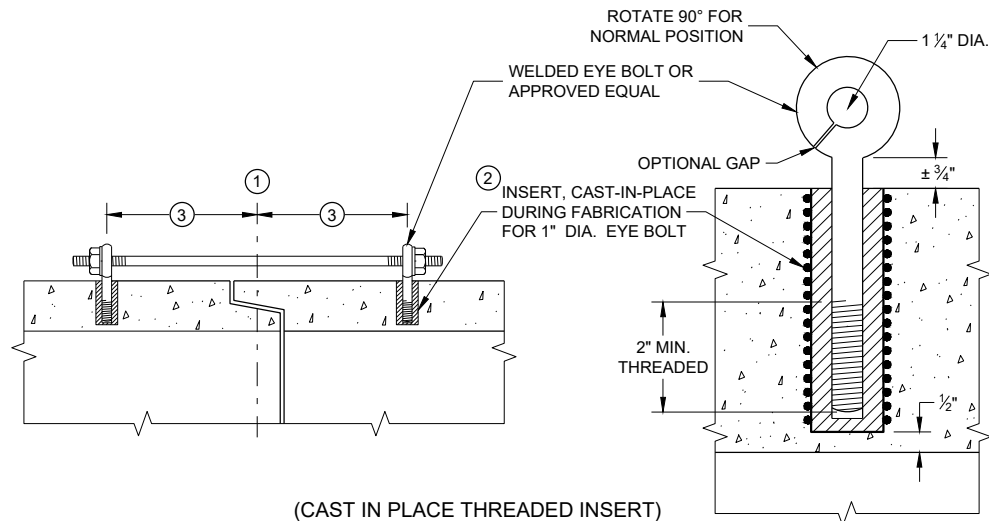
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED 11/30/94 DATE	/S/ Rory L. Rhinehart CHIEF ROADWAY DEVELOP 61	NEER	
FHWA			



EYE BOLTS AND TIE ROD

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

GENERAL NOTES

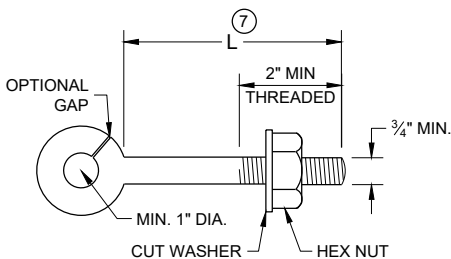
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

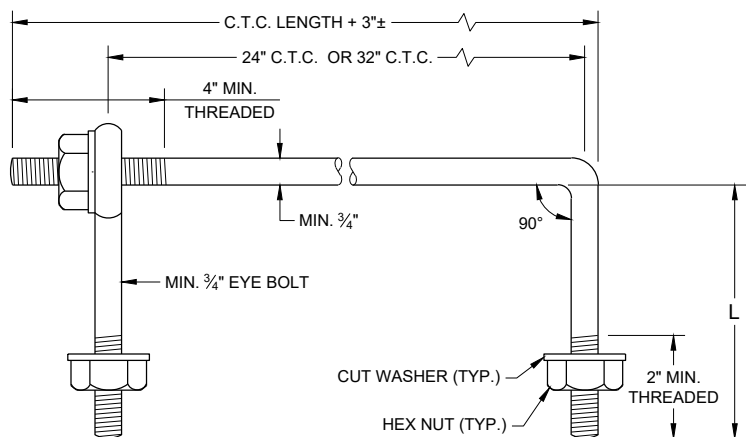
JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

- 1 CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.
- 2 THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.
- 3 HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.
- 4 BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.
- 5 OPENING TO BE ROD DIAMETER PLUS 1 INCH.
- 6 LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.
- 7 EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

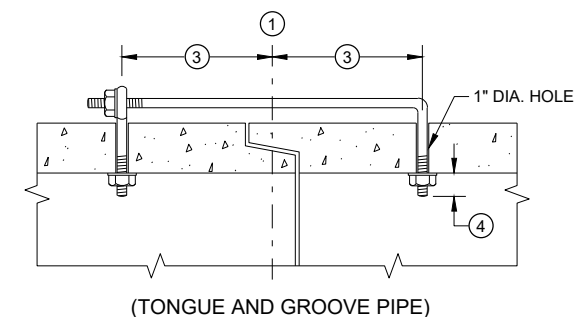


EYE BOLT 7

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

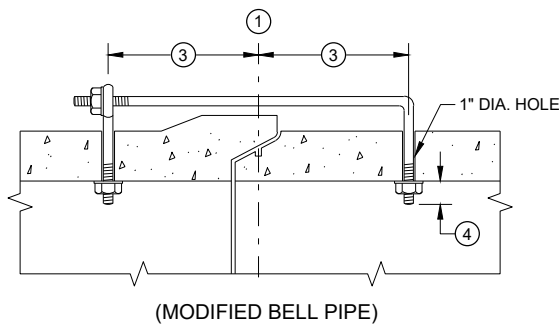


(TONGUE AND GROOVE PIPE)

LONGITUDINAL SECTION

(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

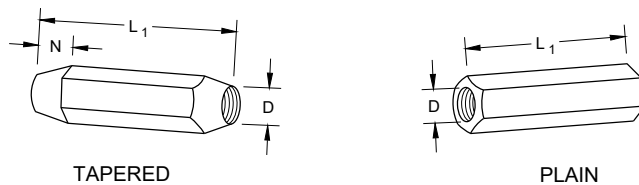


(MODIFIED BELL PIPE)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L ₁	N
12 - 60	5/8	5/8	5	1/2
66 - 84	3/4	3/4	5	1/2
90 - 144	1	1	7	1 1/16

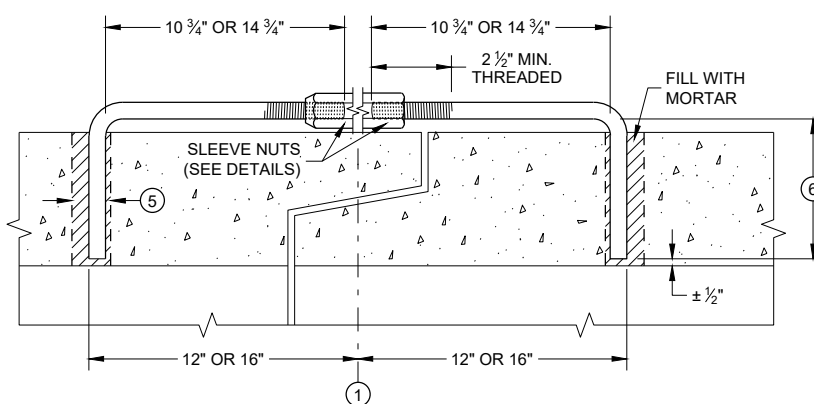
DIMENSIONS SHOWN ARE IN INCHES



TAPERED

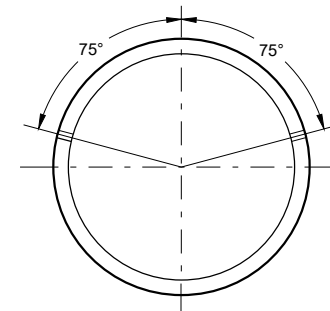
PLAIN

RIGHT AND LEFT THREADS
SLEEVE NUTS



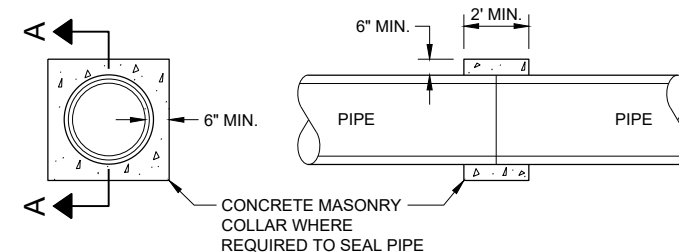
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



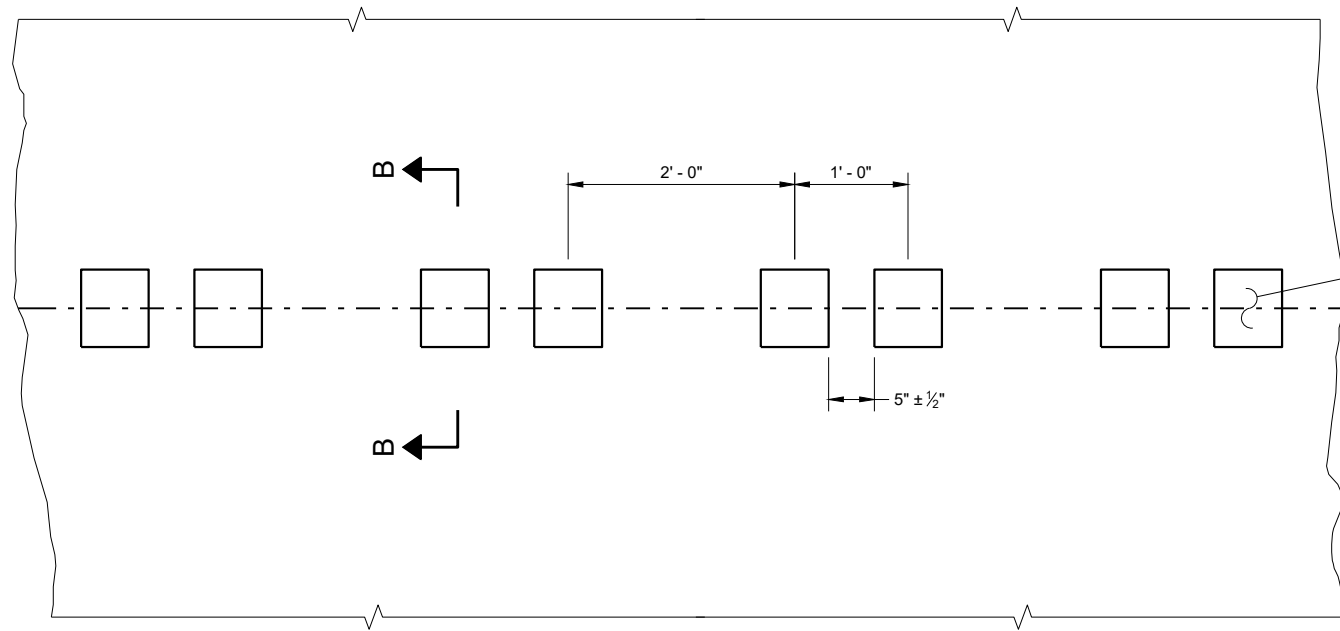
SECTION A - A

CONCRETE COLLAR DETAIL

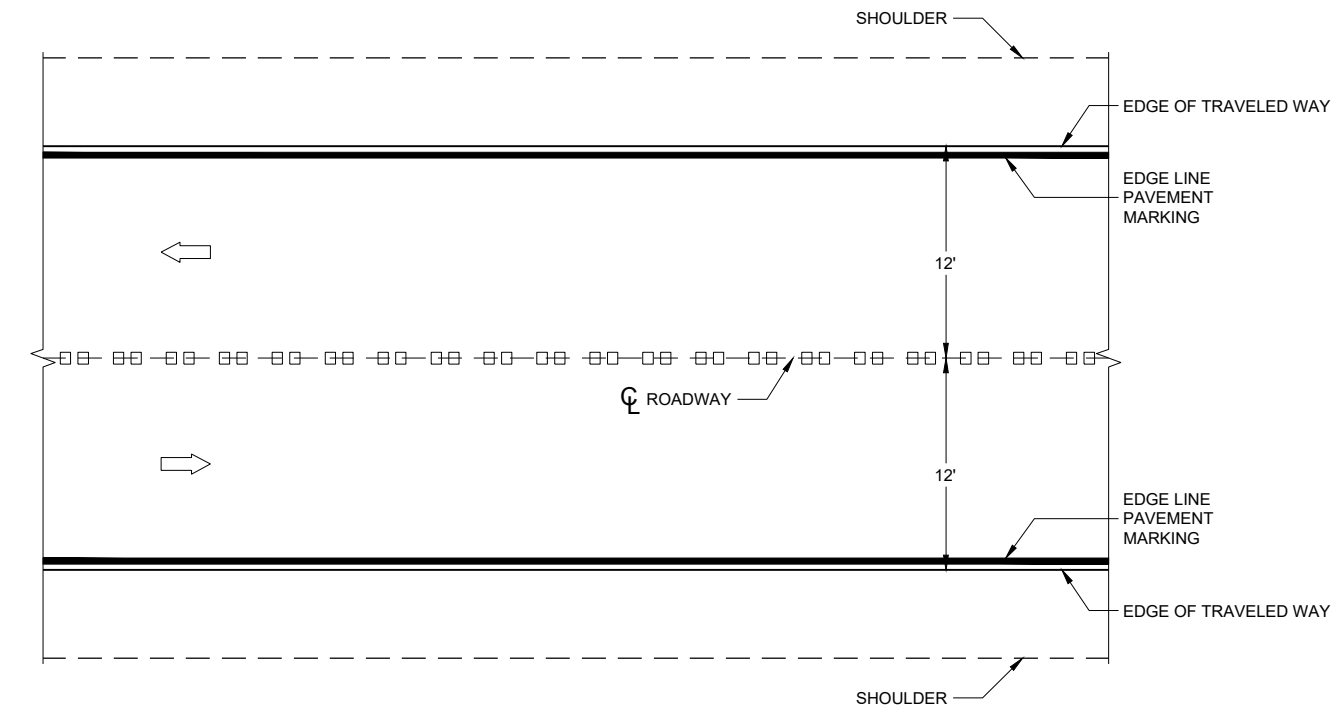
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER
62
FHWA

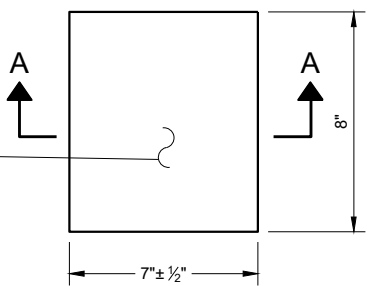


PLAN DETAIL VIEW

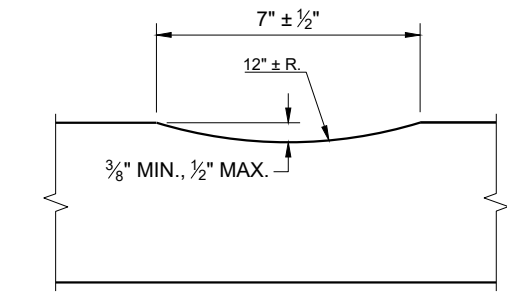


PLAN VIEW

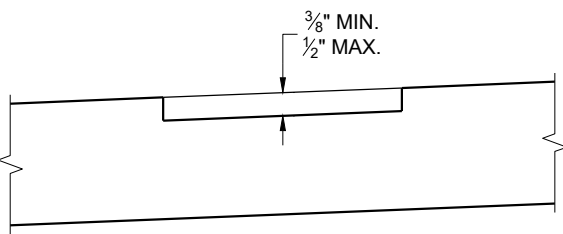
CENTERLINE RUMBLE STRIPS - ASPHALT



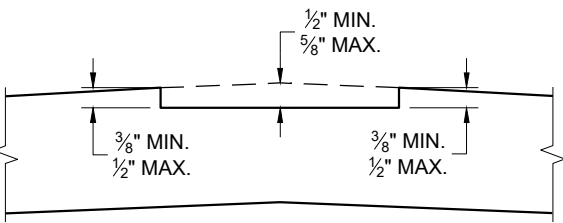
PLAN VIEW (SINGLE GROOVE)



SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY

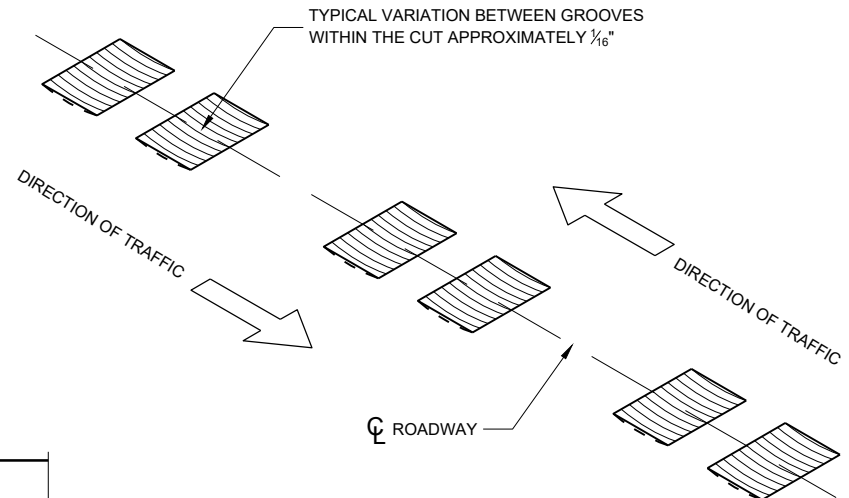


SECTION B - B
CROWNED ROADWAY

GENERAL NOTES

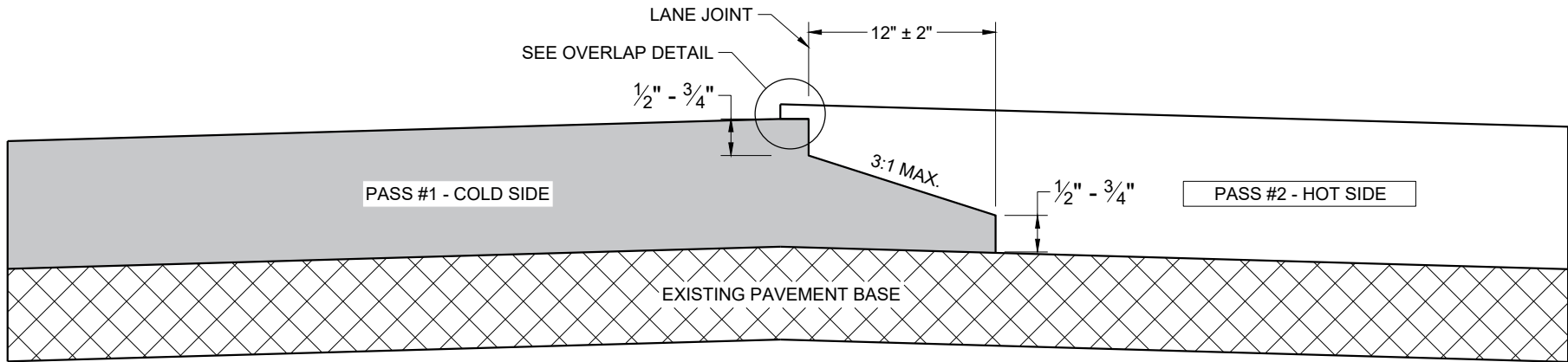
DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A11 SHEETS "d" AND "e".

CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.

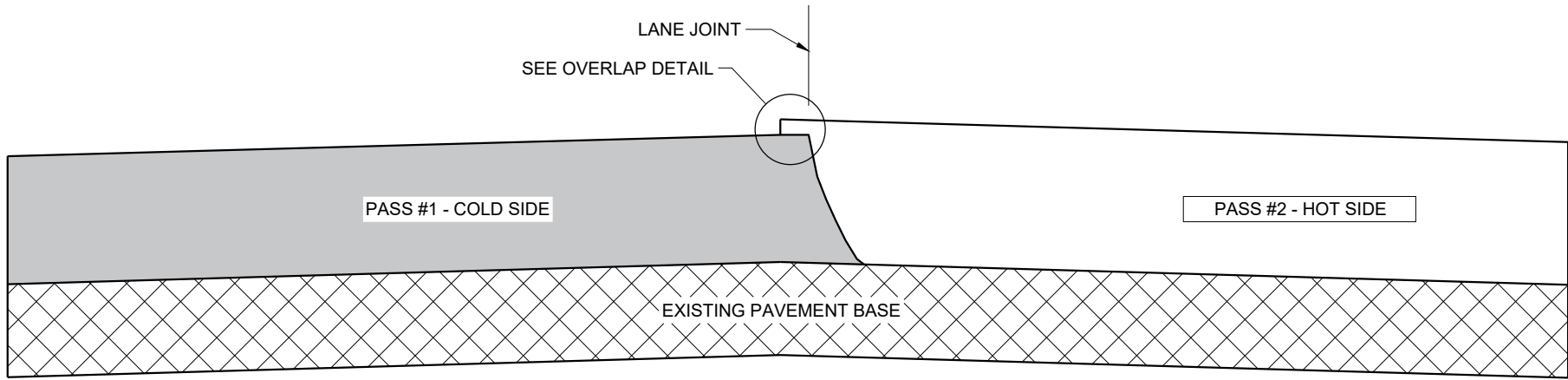


CENTERLINE RUMBLE STRIPS - ASPHALT

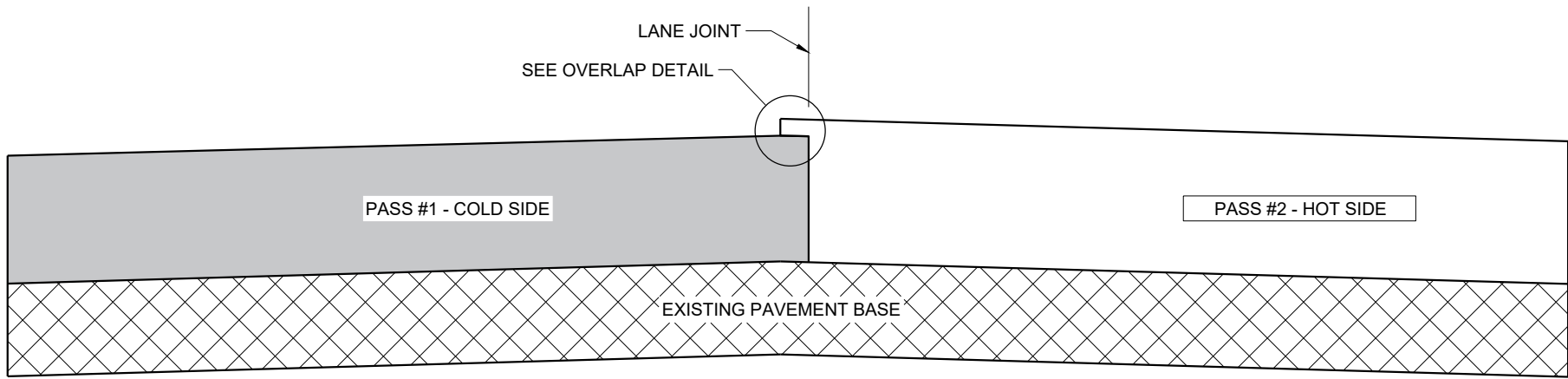
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)**

GENERAL NOTES

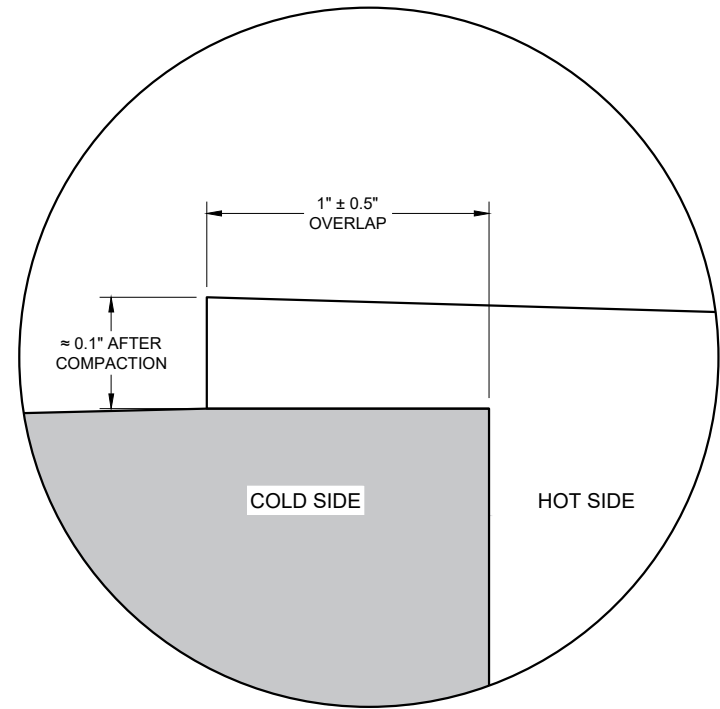
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.

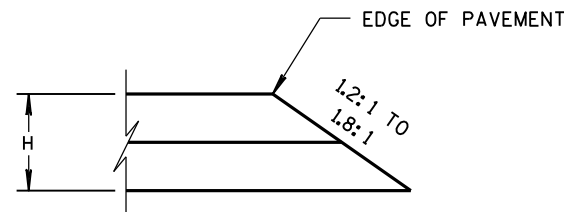


OVERLAP DETAIL (TYPICAL)

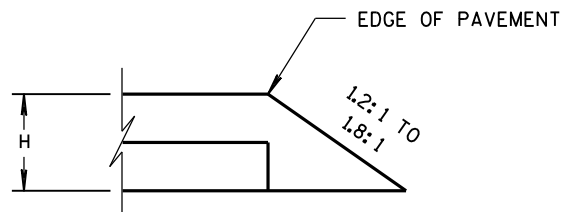
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
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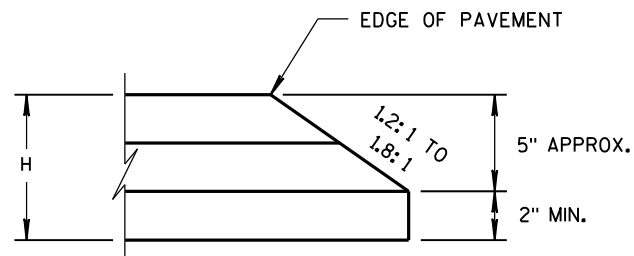
APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGIN 64
FHWA



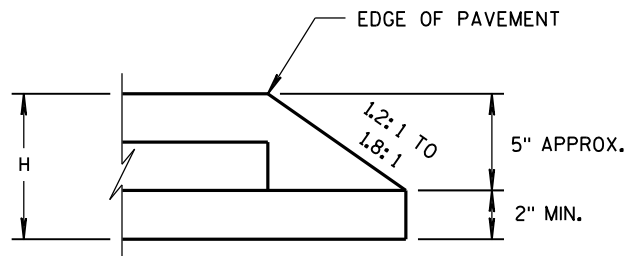
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

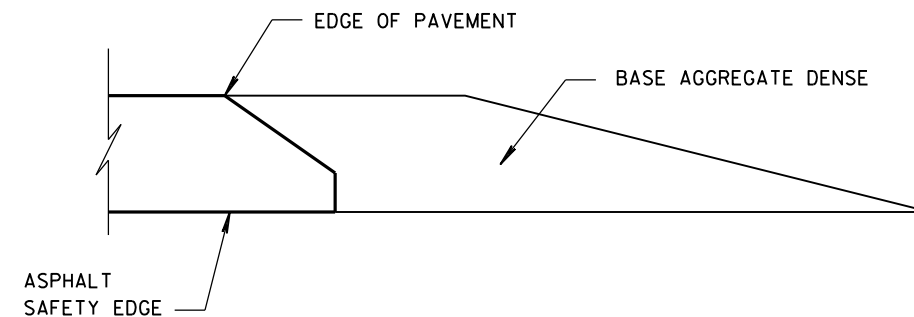


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE_{SM}

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012

DATE

FHWA

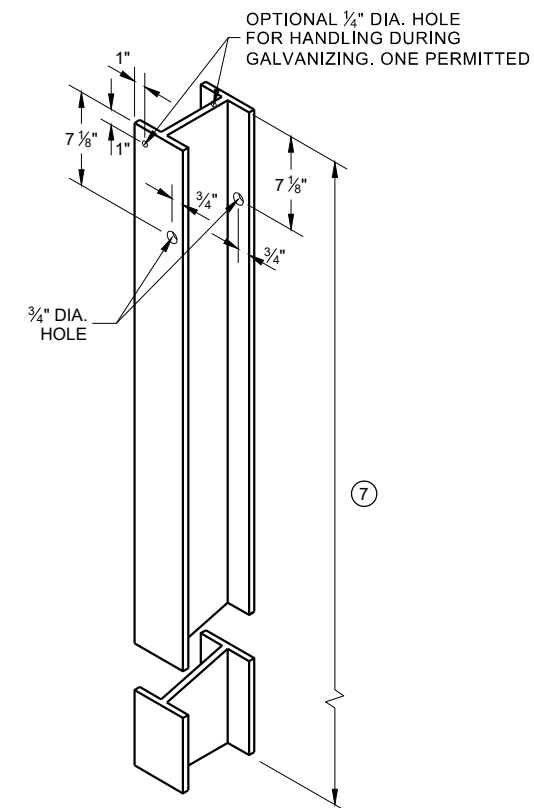
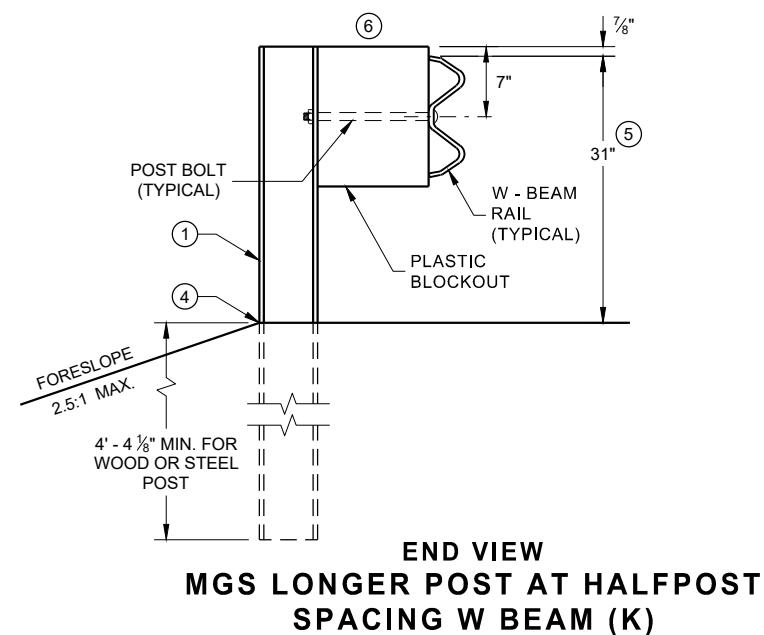
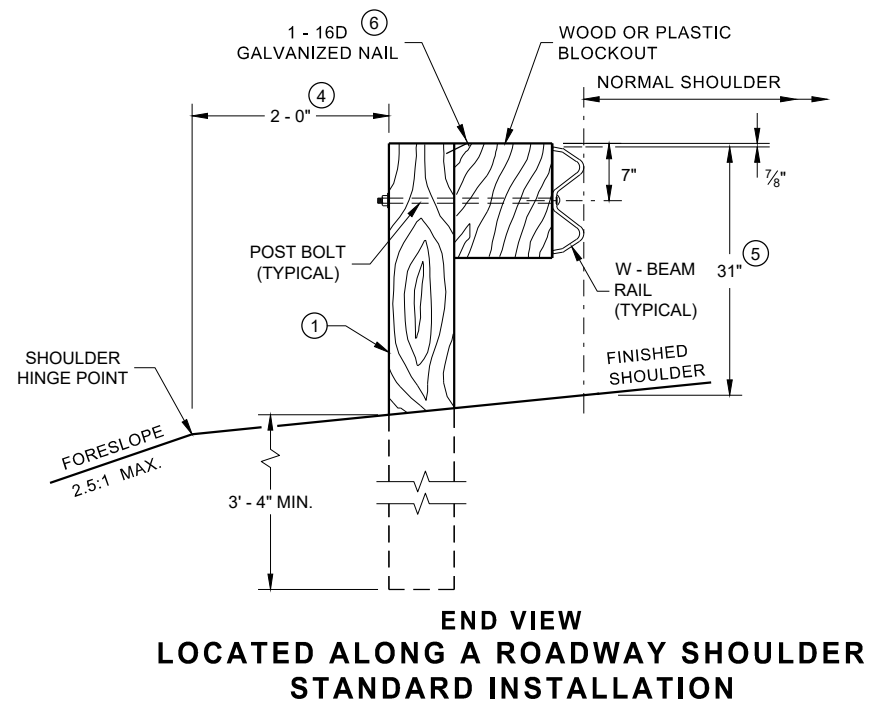
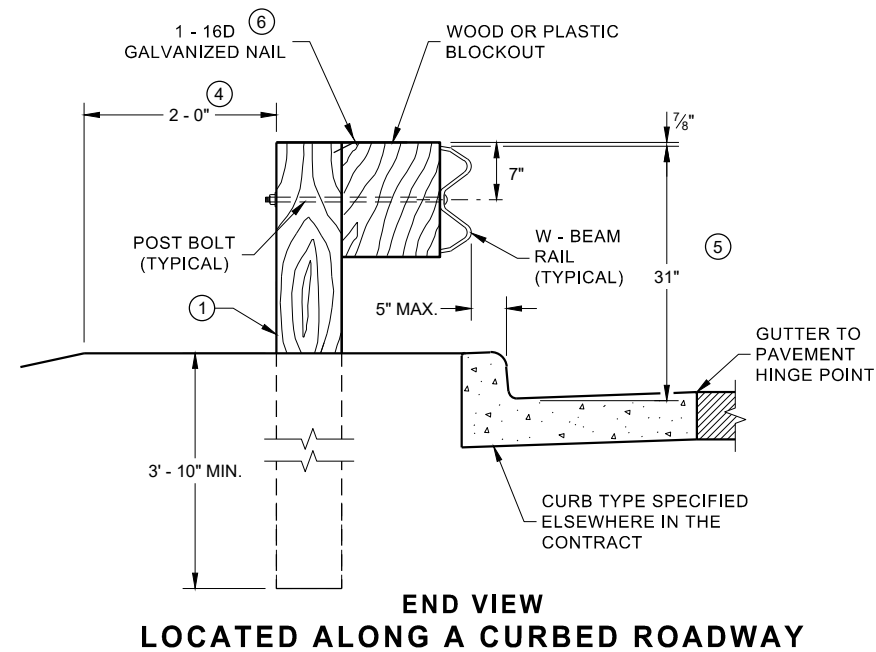
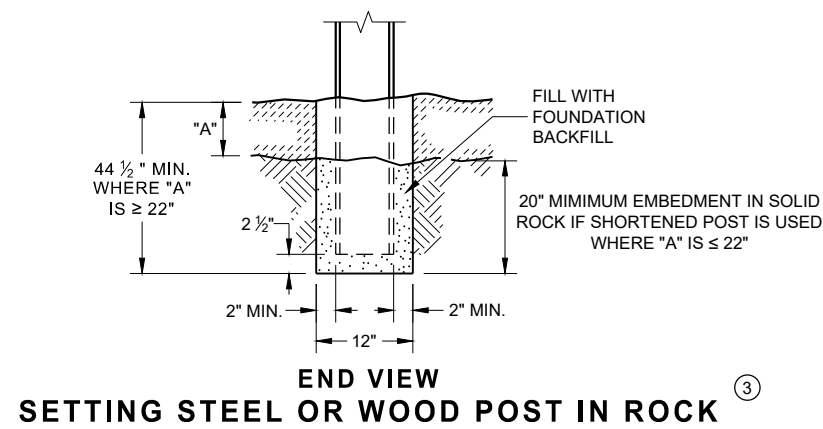
/s/ Jerry H. Zoaga

ROADWAY STANDARDS ENGINEER

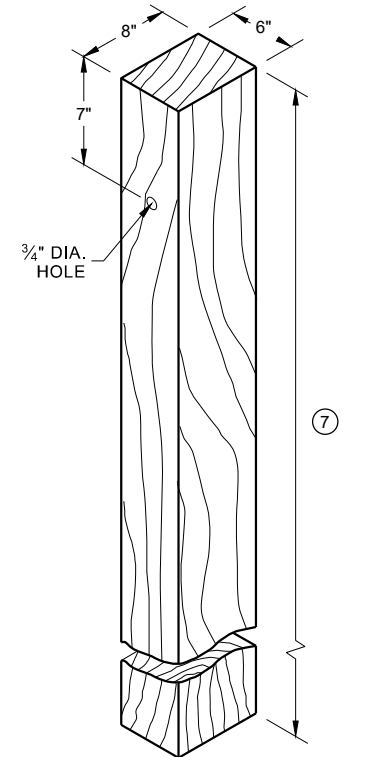
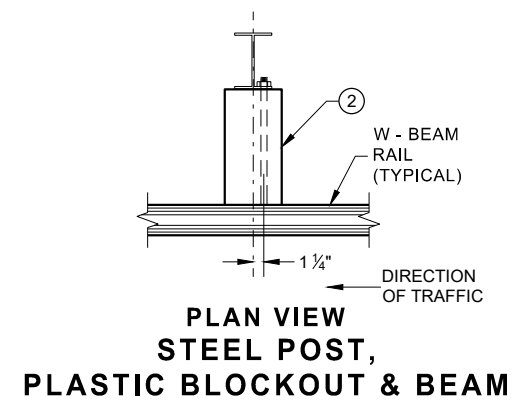
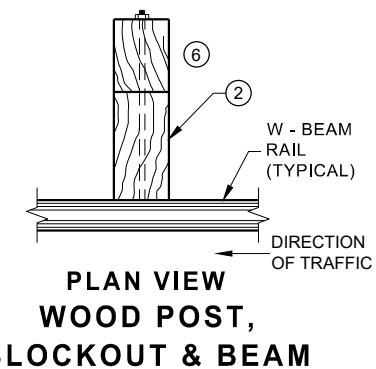
65

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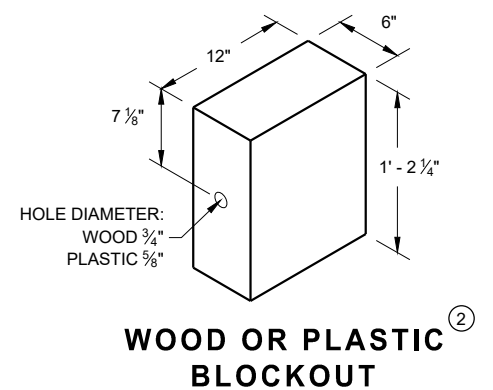
- ① WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.
- ③ IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS TO LENGTH AND INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.
- ④ WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).
- ⑤ FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS $\pm 1"$. FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 3/4" TO 32".
- ⑥ WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.
- ⑦ TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



**STEEL POST & HOLE
PUNCHING DETAIL
(W 6 X 9) ①**



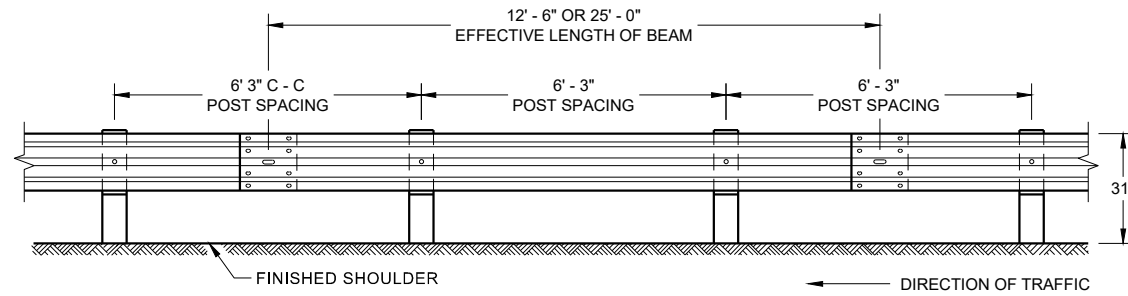
WOOD POST (6" X 8") NOMINAL ⁽¹⁾



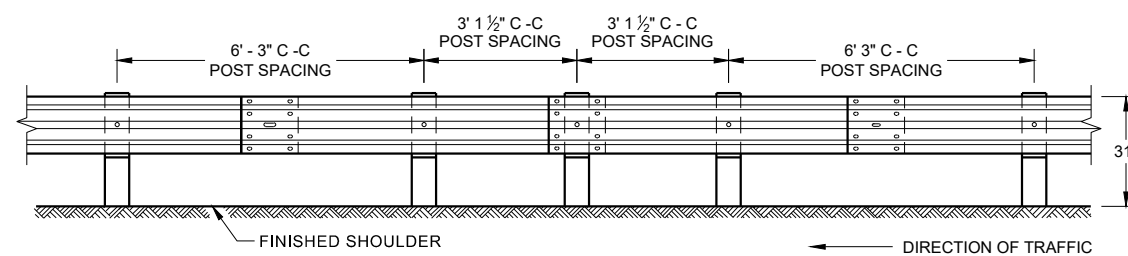
WOOD OR PLASTIC BLOCKOUT ⁽²⁾

**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

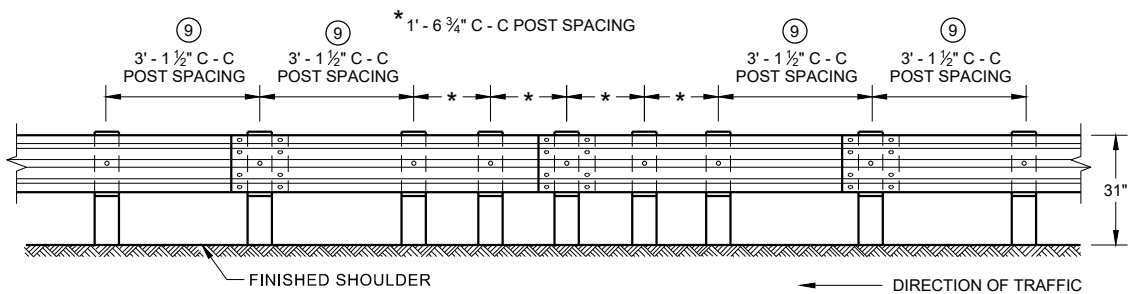
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 66



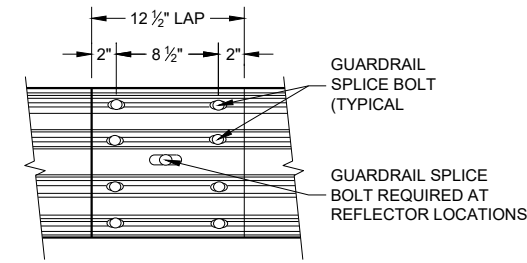
**FRONT VIEW
POST SPACING STANDARD INSTALLATION**



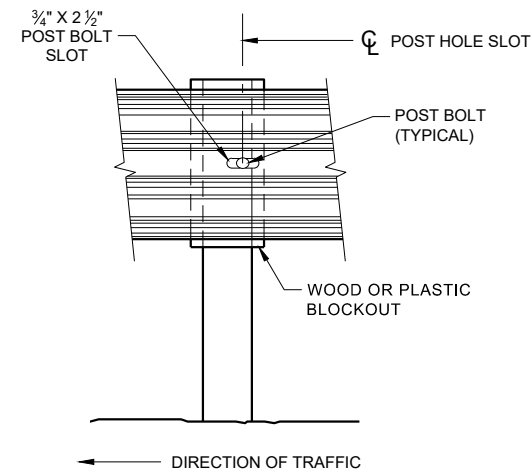
**FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)**



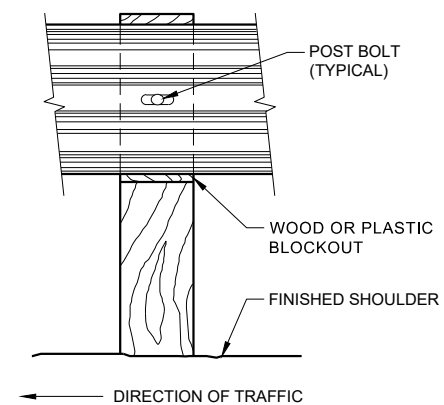
**FRONT VIEW
QUARTER POST SPACING (QS)**



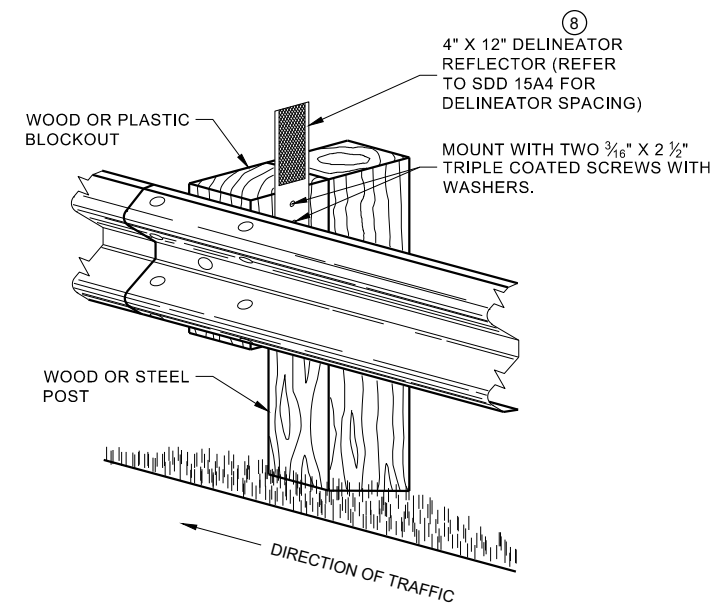
**FRONT VIEW
MID-SPAN BEAM SPLICE**



FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



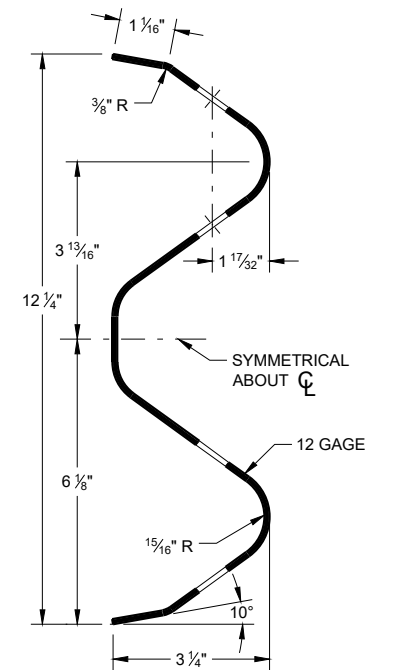
**ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION**

GENERAL NOTES

- 8 DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
- 9 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A $\frac{3}{8}$ " DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES $\frac{3}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND $\frac{3}{8}$ " DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

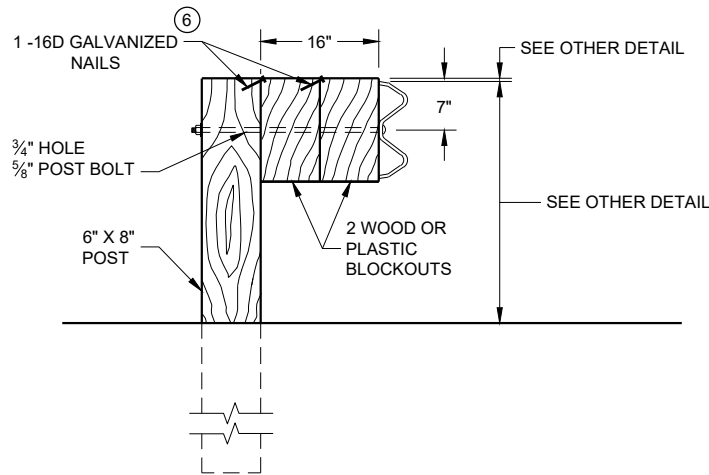
GUARD RAIL SPLICE BOLTS ARE A $\frac{3}{8}$ " DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES $\frac{3}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



SECTION THRU W-BEAM RAIL

**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

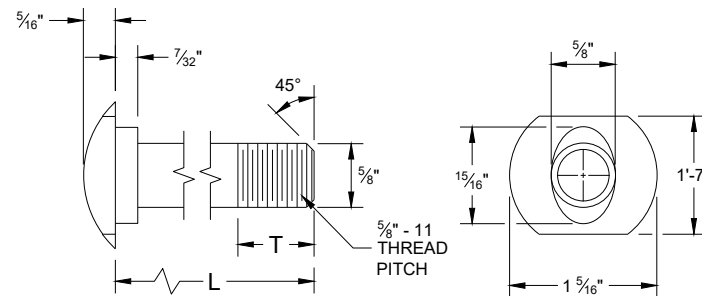
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL FOR 16" BLOCKOUT DEPTH

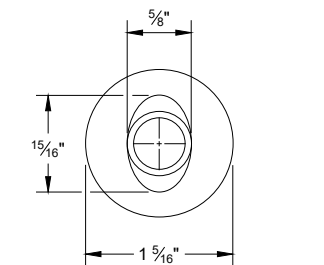
IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

- NOTE:
1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF $\frac{3}{16}$ ".
 2. IF THE BOLT EXTENDS MORE THAN $\frac{1}{4}$ " FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

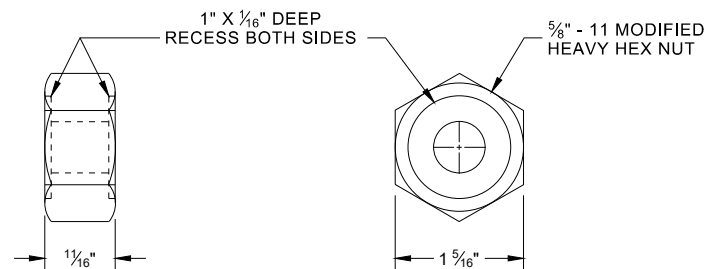


POST BOLT TABLE

L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"

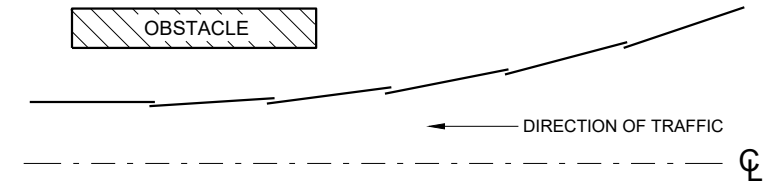


ALTERNATE BOLT HEAD

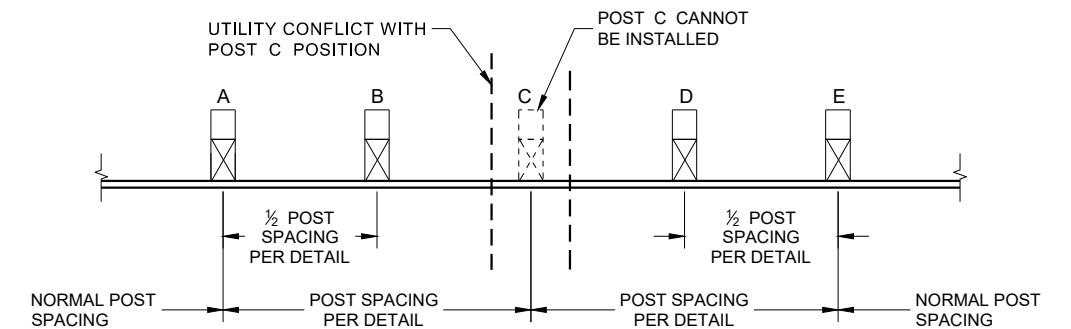


POST BOLT, SPLICE BOLT
AND RECESS NUT

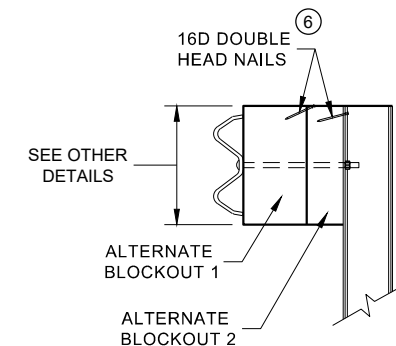
- 6 WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



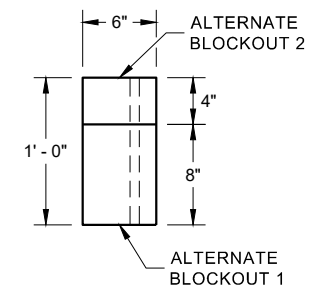
PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS
UNDERGROUND OBSTRUCTION



SIDE VIEW



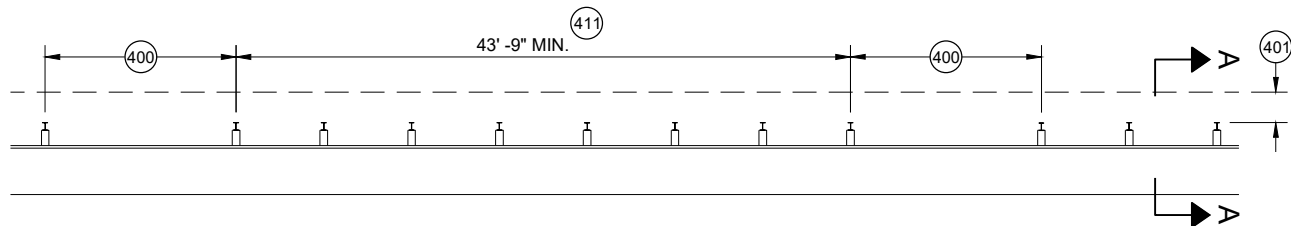
PLAN VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

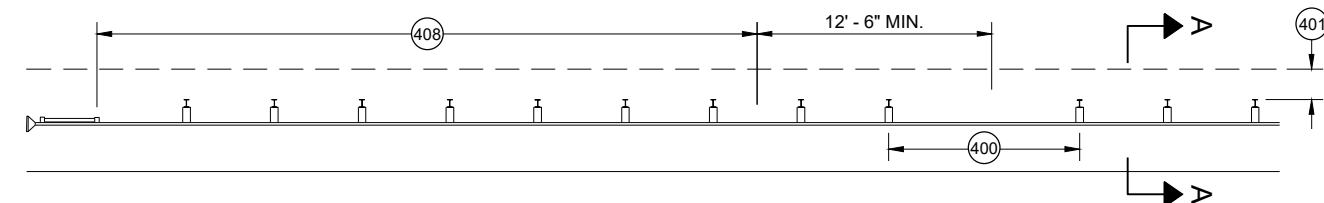
- NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.
- DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

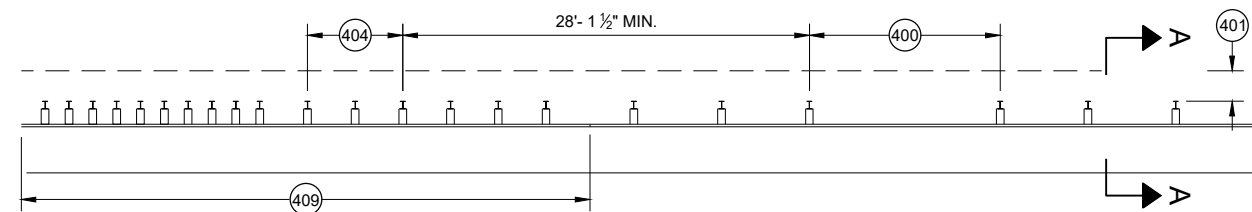
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



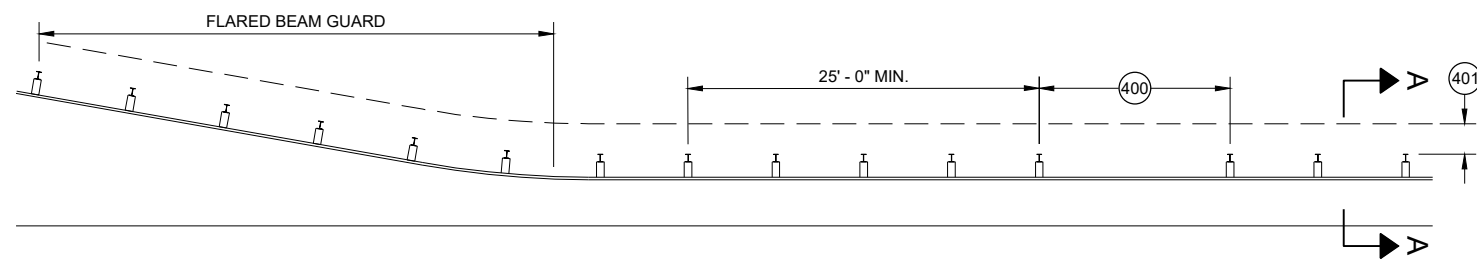
MISSING POST IN MGS GUARDRAIL



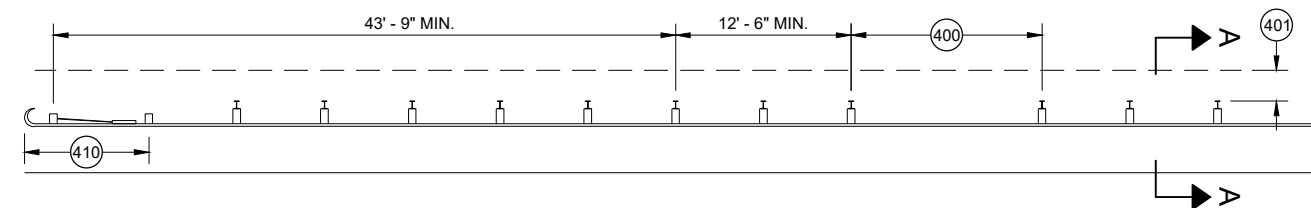
MISSING POST IN MGS GUARDRAIL NEAR EAT



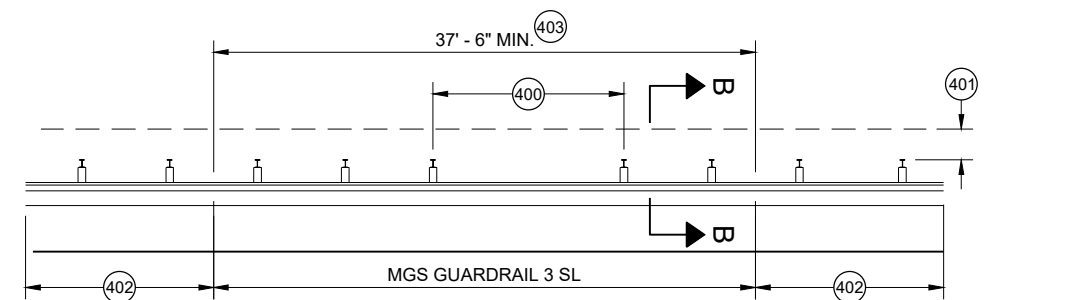
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

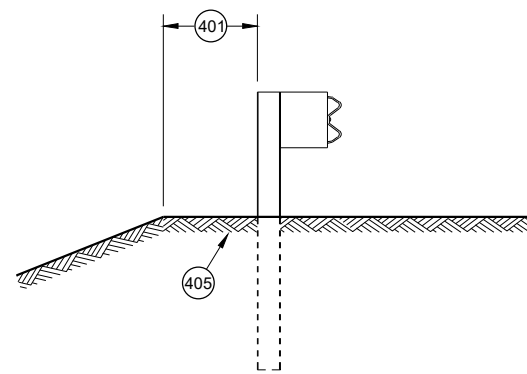


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

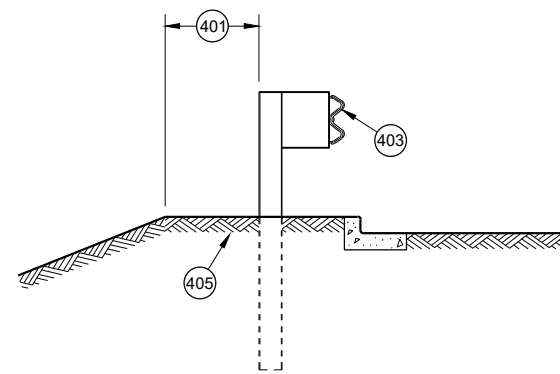


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL)

- (400) MAX SPAN 12' - 6"
- (401) 2' MIN.
- (402) MGS GUARDRAIL 3
- (403) NESTING BEAM GUARD
- (404) ASYMMETRIC TRANSITION
- (405) SOIL WELL DRAINED AND COMPACTED
- (406) SEE OTHER DRAWINGS IN THIS SDD
- (407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
- (408) SEE SDD 14B44
- (409) SEE SDD 14B45
- (410) SEE SDD 14B47
- (411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A



SECTION B - B

**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

FHWA

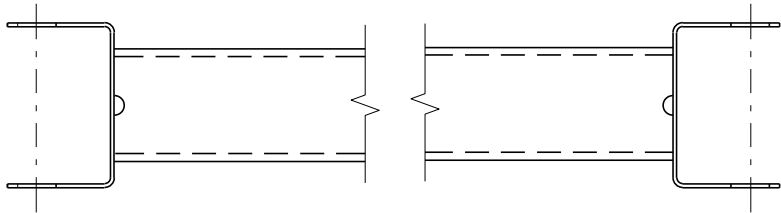
- (A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- (B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED
- (C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.
- (D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.
- (E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

THE CENTER OF THE UPPER 3 1/2" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.

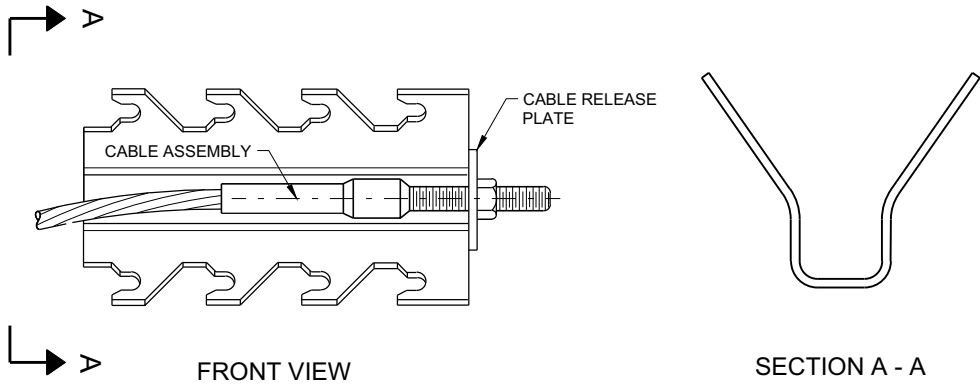


STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 70

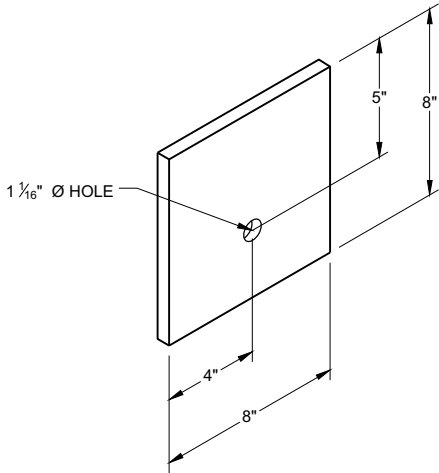


GENERIC GROUND STRUT⁹ ^E

BILL OF MATERIALS	
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	IMPACT HEAD
⑬	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
⑭	SOIL PLATE
⑮	UPPER POST NO. 2
⑯	LOWER POST NO. 2



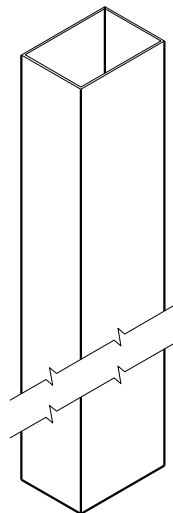
GENERIC ANCHOR CABLE BOX⁹ ^E



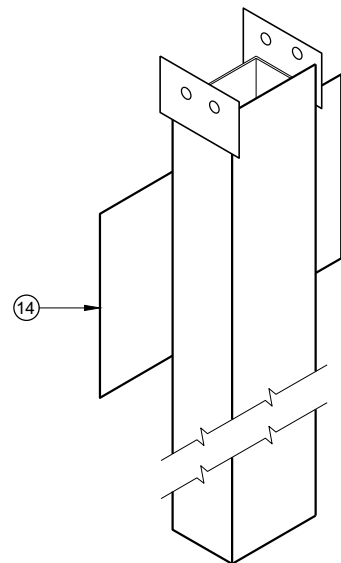
BEARING PLATE⁶ ^E

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

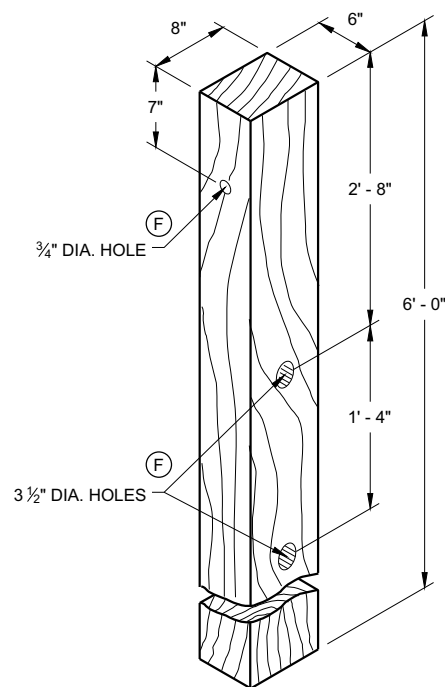
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



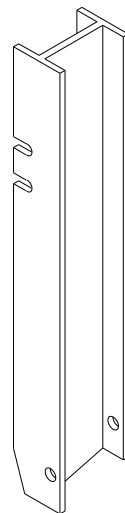
UPPER POST NO. 1 ⁽¹⁾ (E)



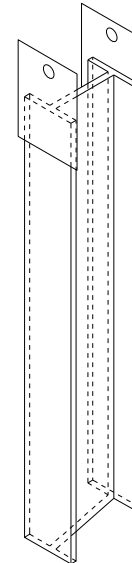
LOWER POST NO. 1 ⁽²⁾ (E)



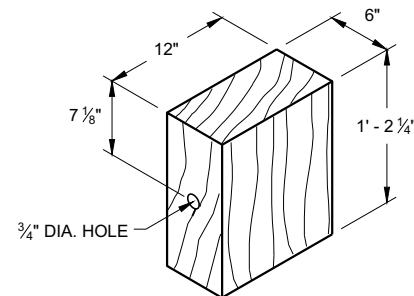
WOOD CRT POST ⁽³⁾ (E)
POSTS NUMBER 3-9



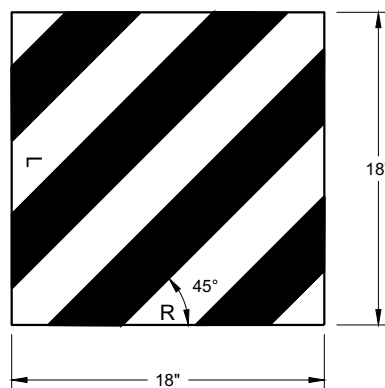
UPPER POST NO. 2 ⁽¹⁵⁾ (E)



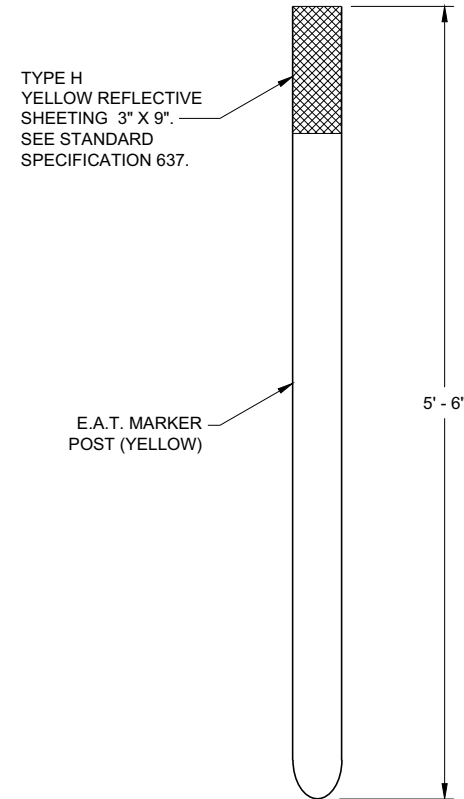
LOWER POST NO. 2 ⁽¹⁶⁾ (E)



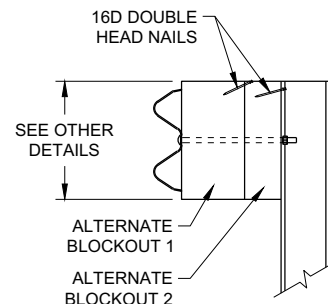
WOOD BLOCKOUT ⁽⁴⁾
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



REFLECTIVE SHEETING DETAIL ^(E)

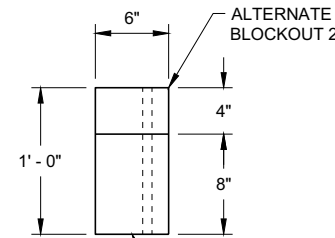


E.A.T. MARKER POST ⁽¹³⁾



SIDE VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

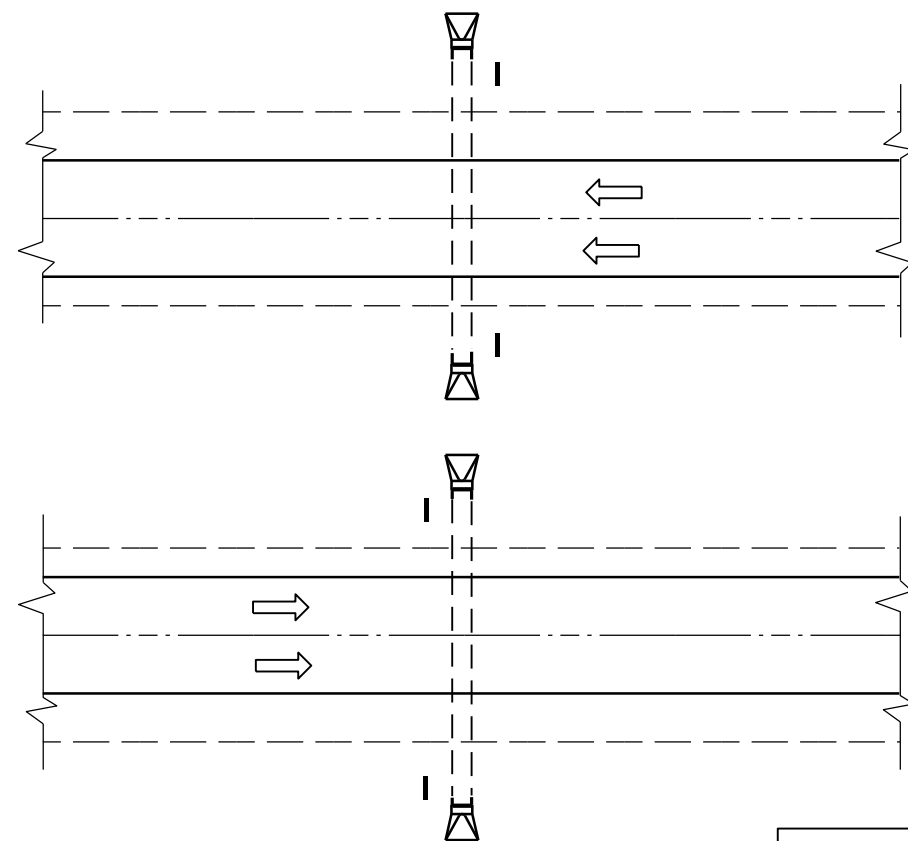


TOP VIEW

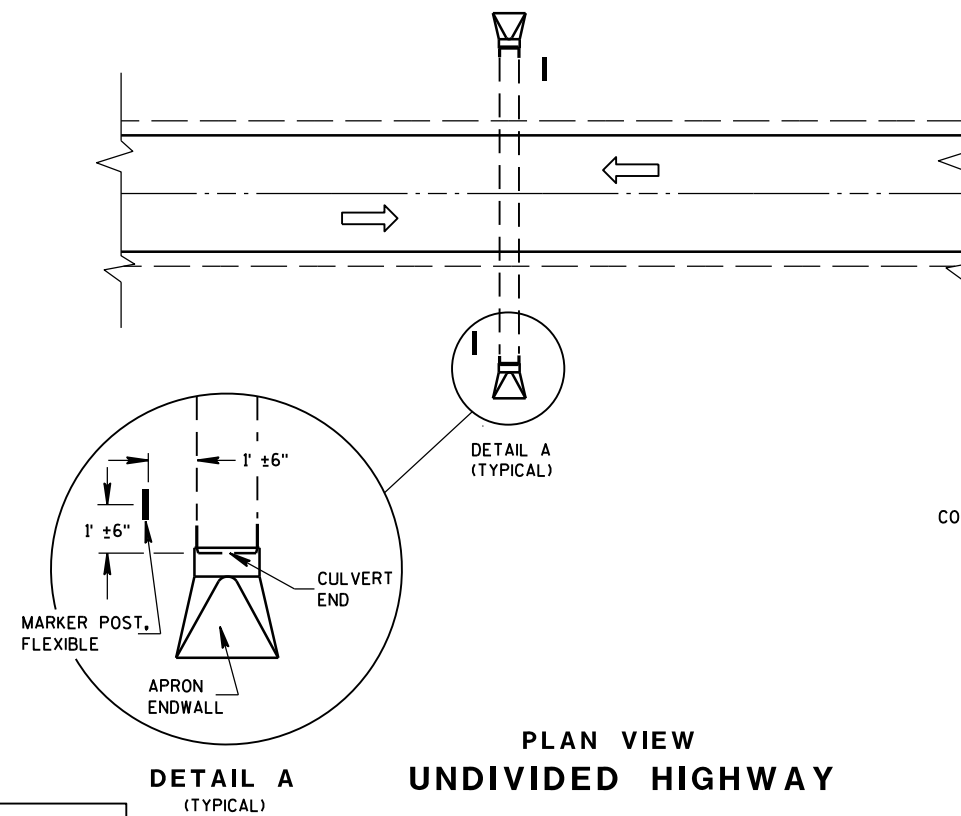
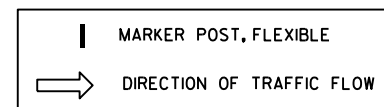
**MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 DATE /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA



PLAN VIEW
DIVIDED HIGHWAY

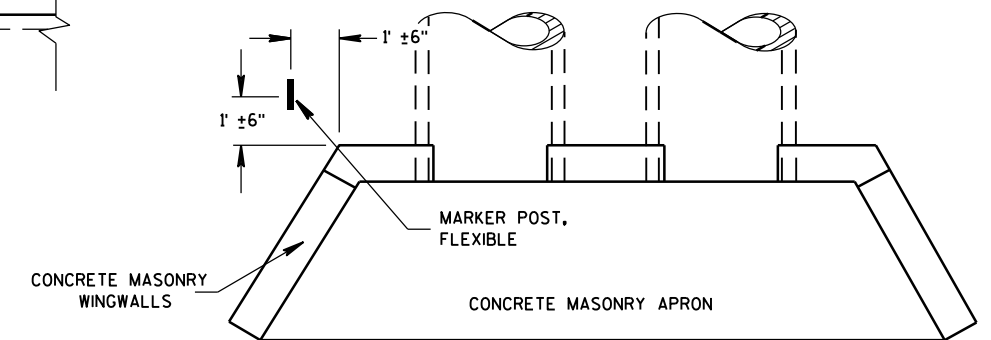


PLAN VIEW
UNDIVIDED HIGHWAY

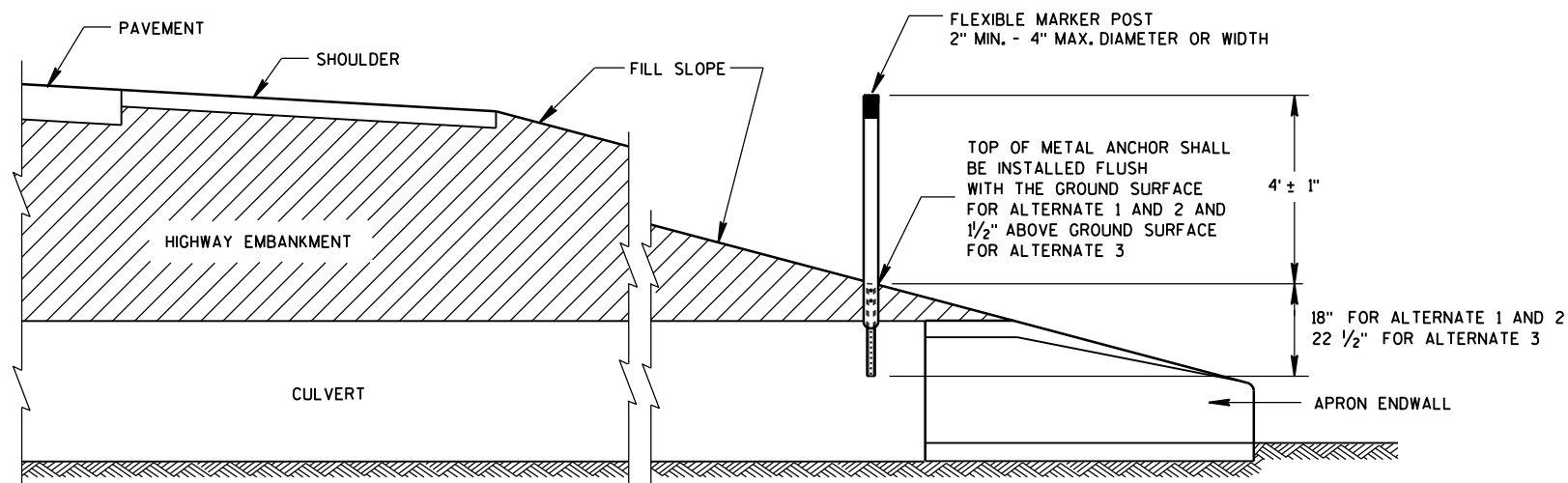
FLEXIBLE MARKER POST LOCATION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



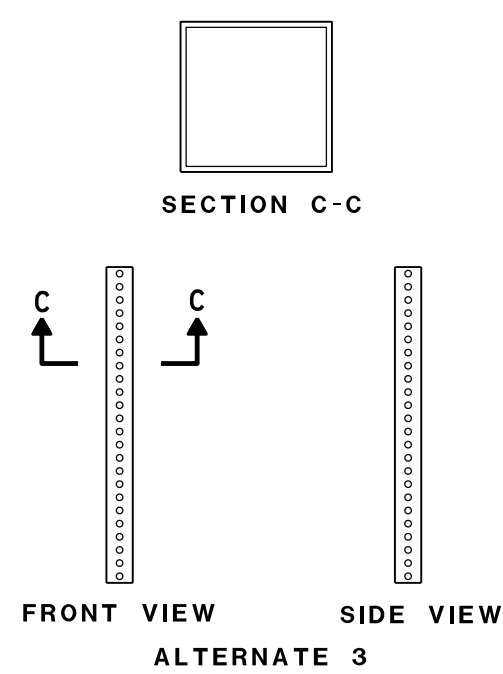
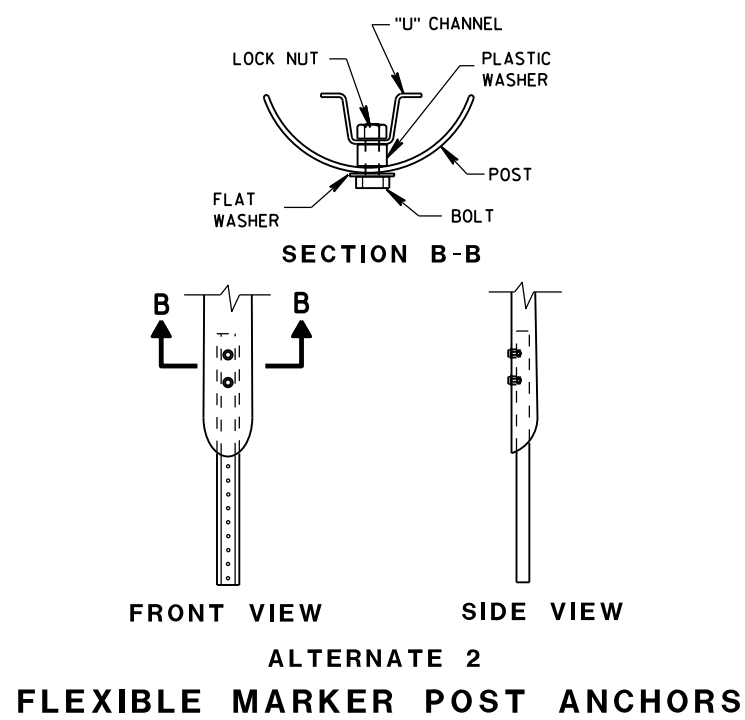
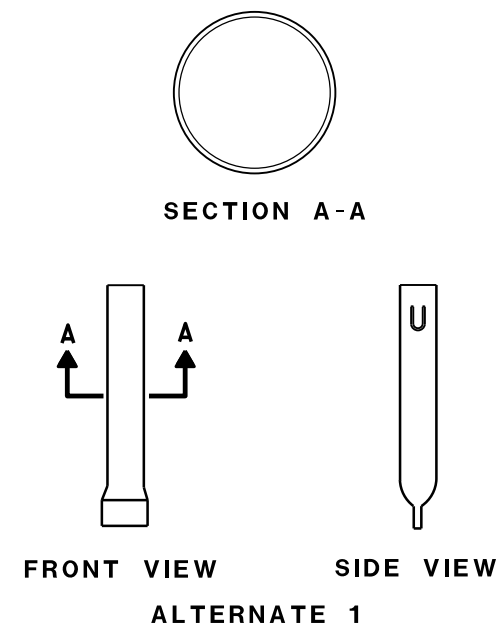
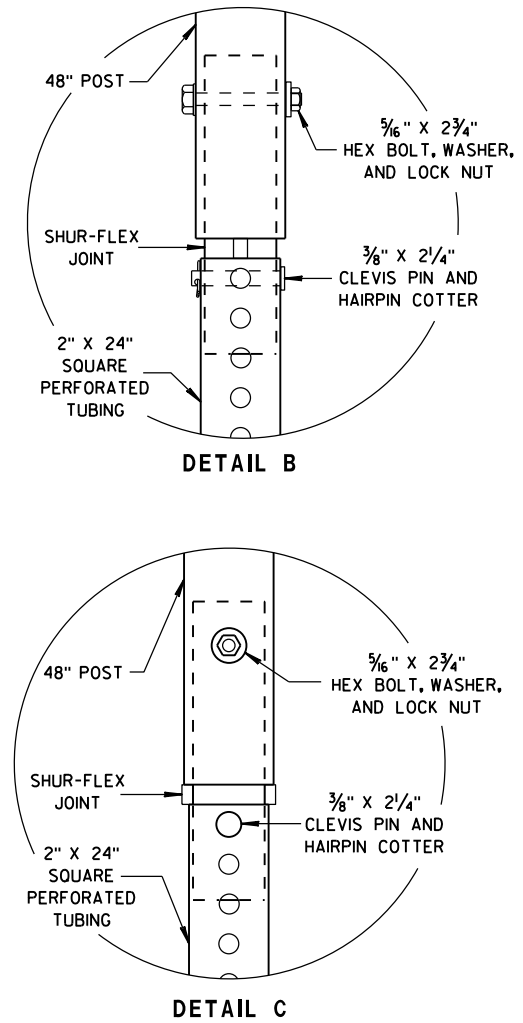
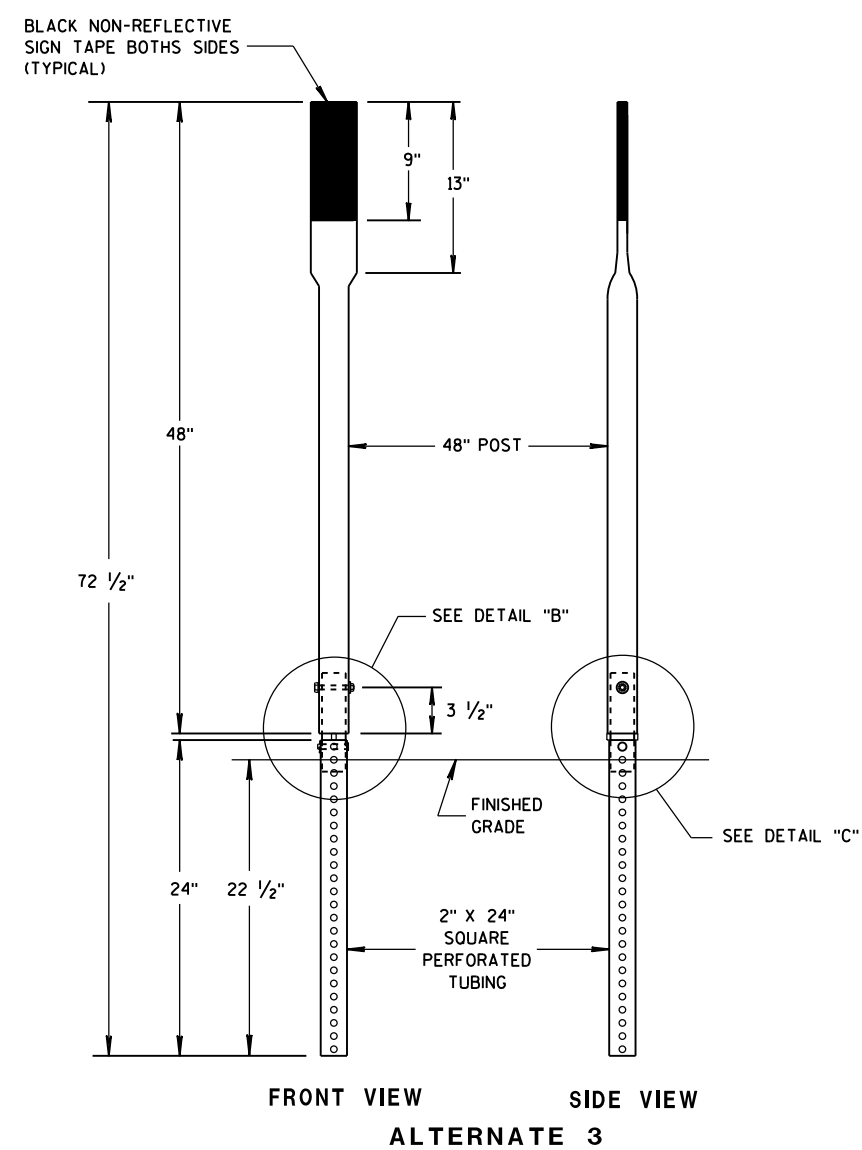
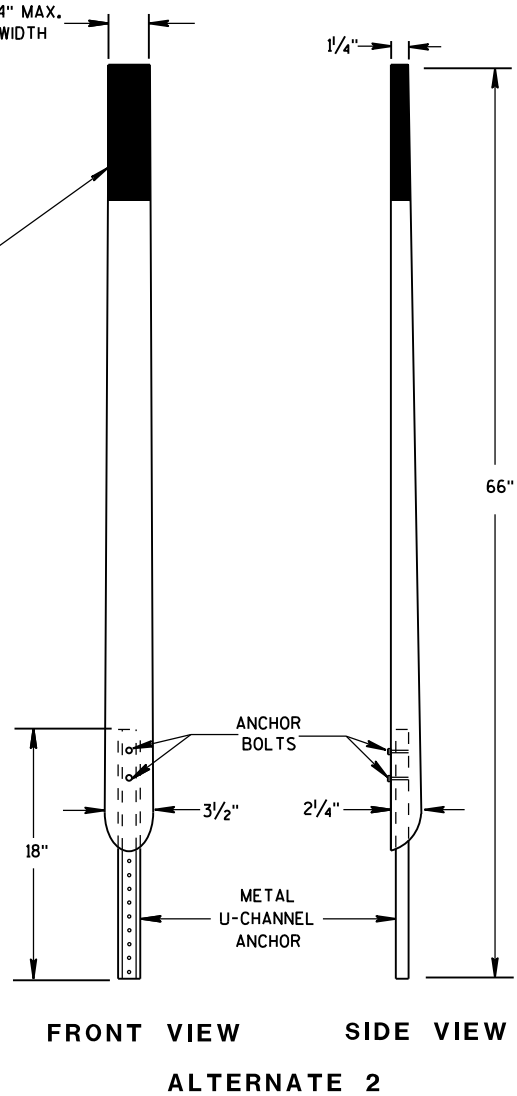
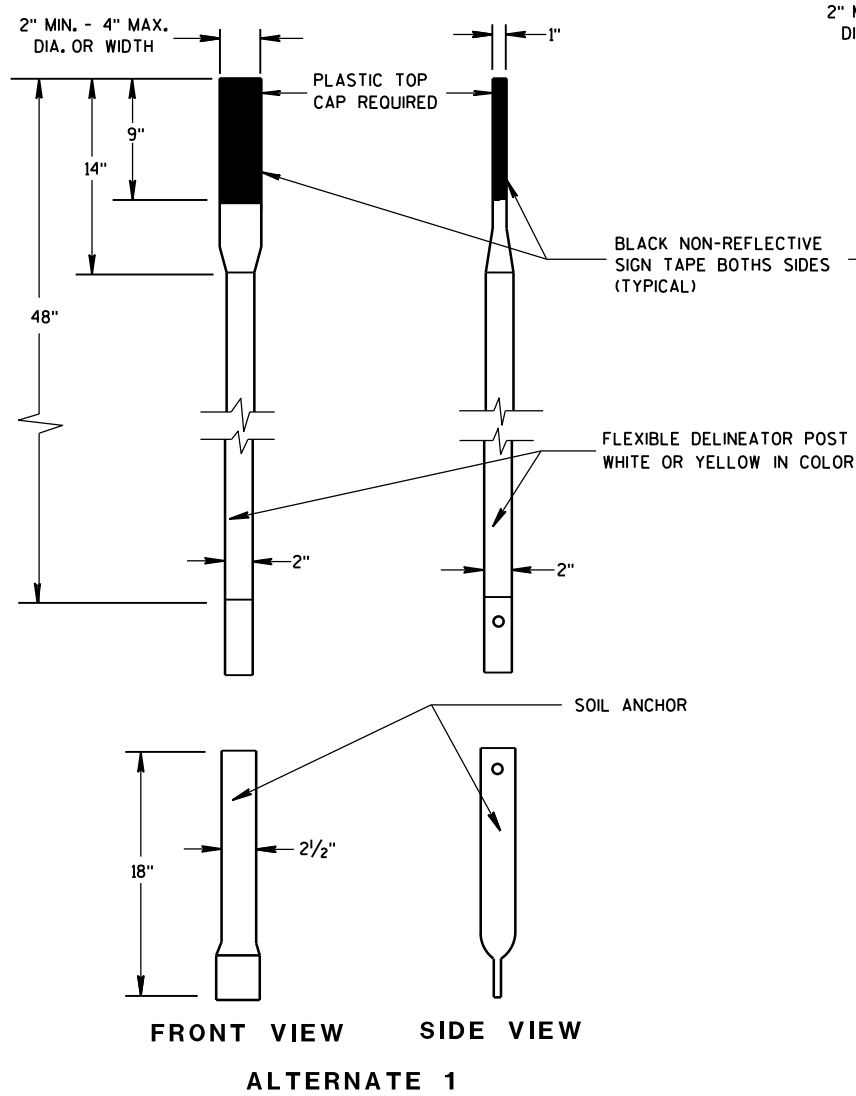
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



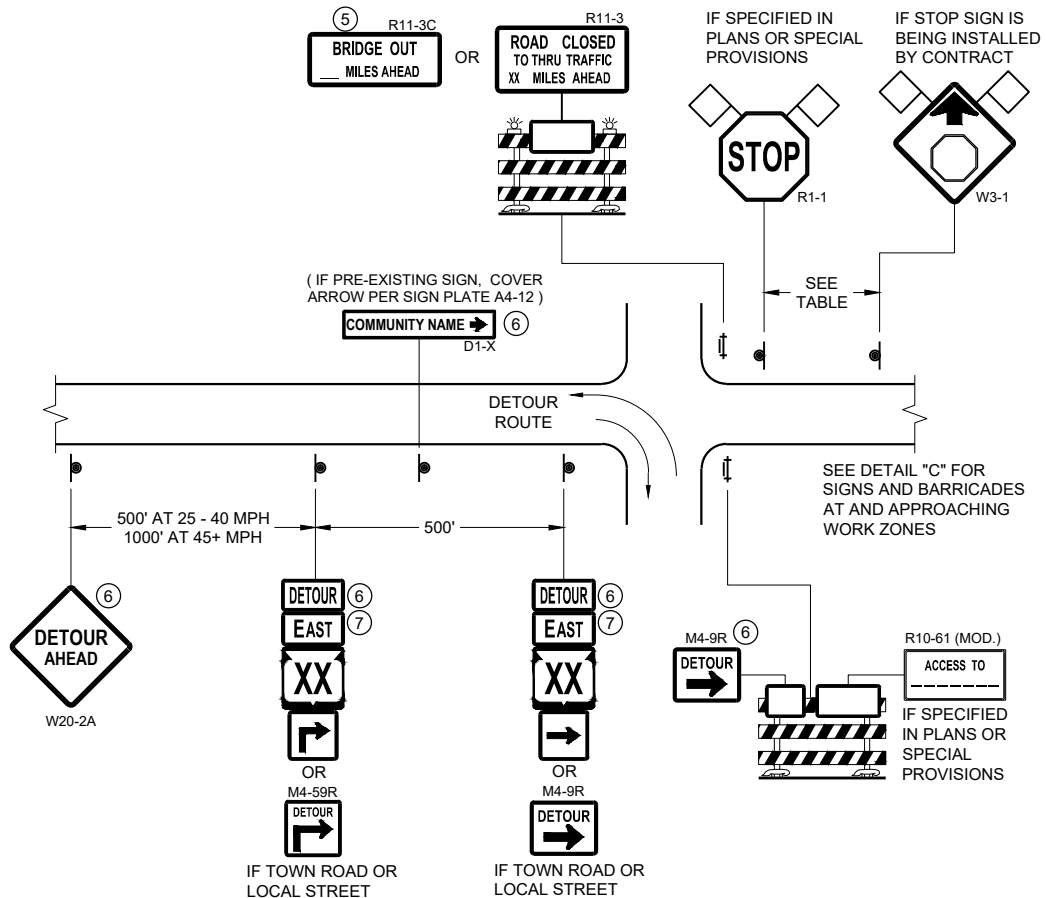
CROSS SECTION
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

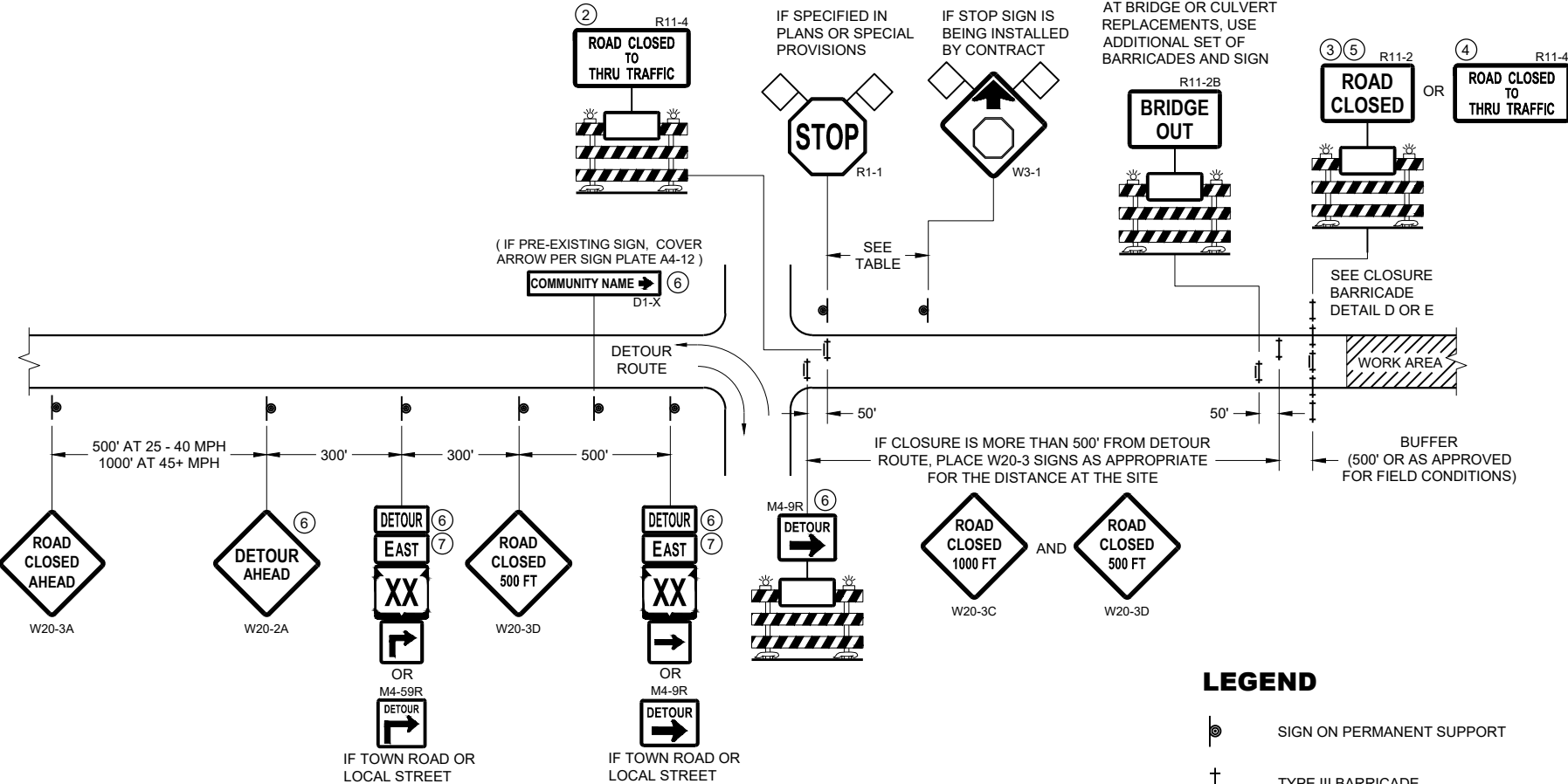
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



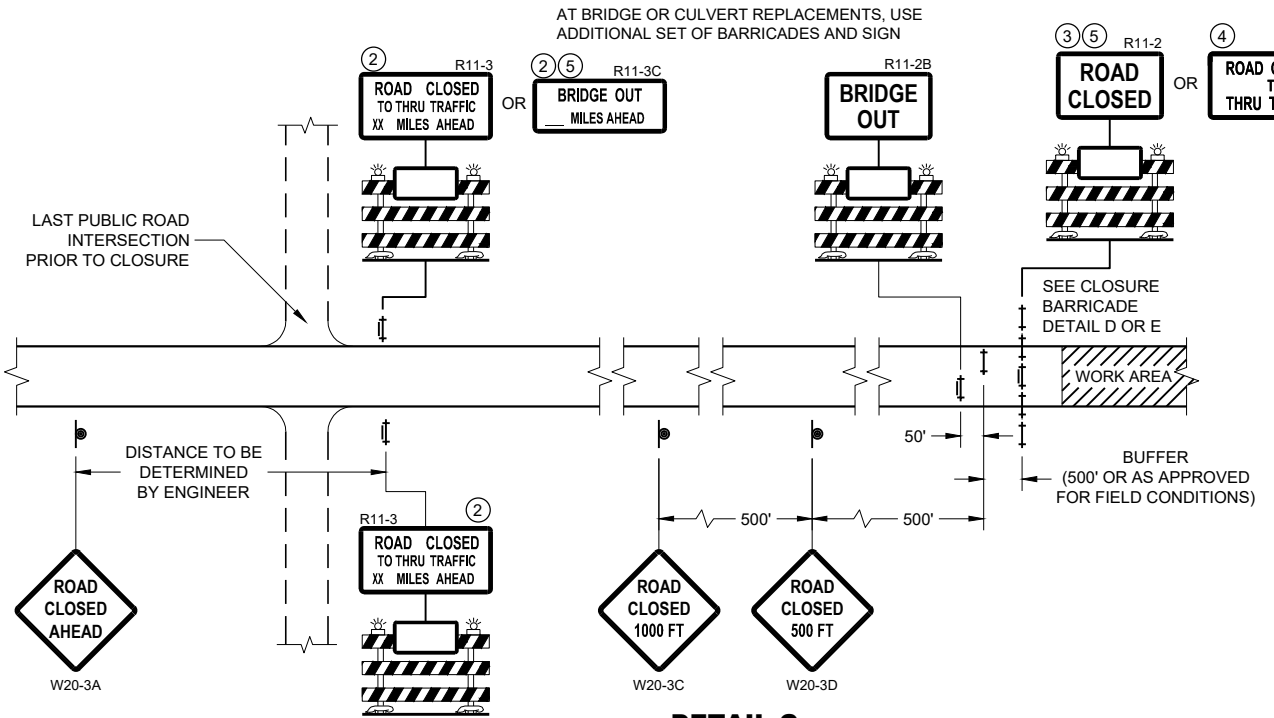
FLEXIBLE MARKER POST FOR CULVERT END		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED 10/1/2012 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER 74	IGN
FHWA		



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

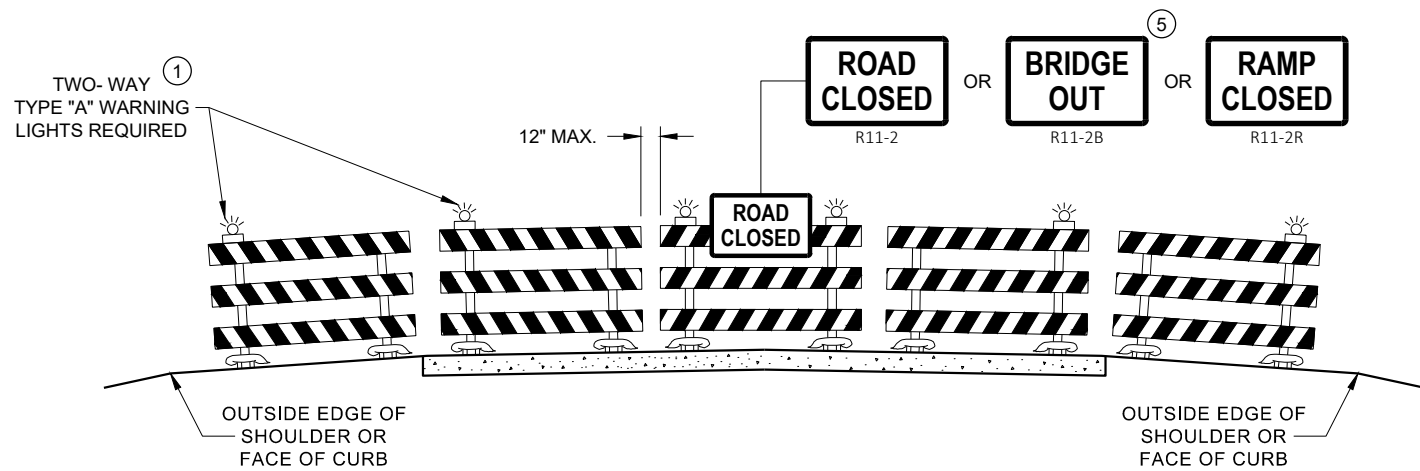
LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR M4 - 8
- EAST M3 - X
- XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
- OR M05 - 1 OR M06 - 1

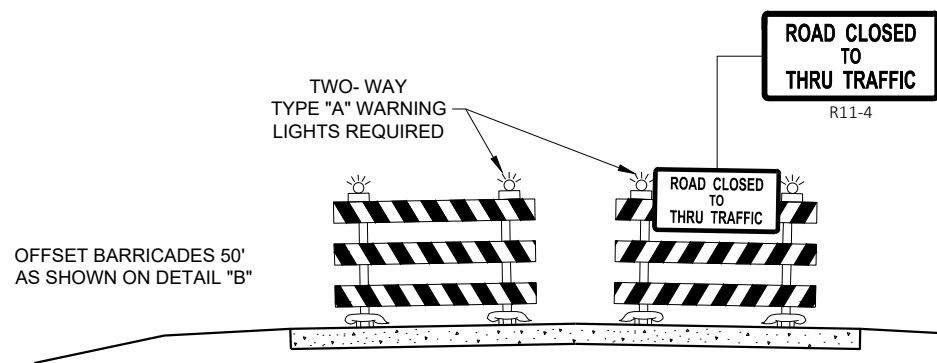
**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 75
FHWA



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

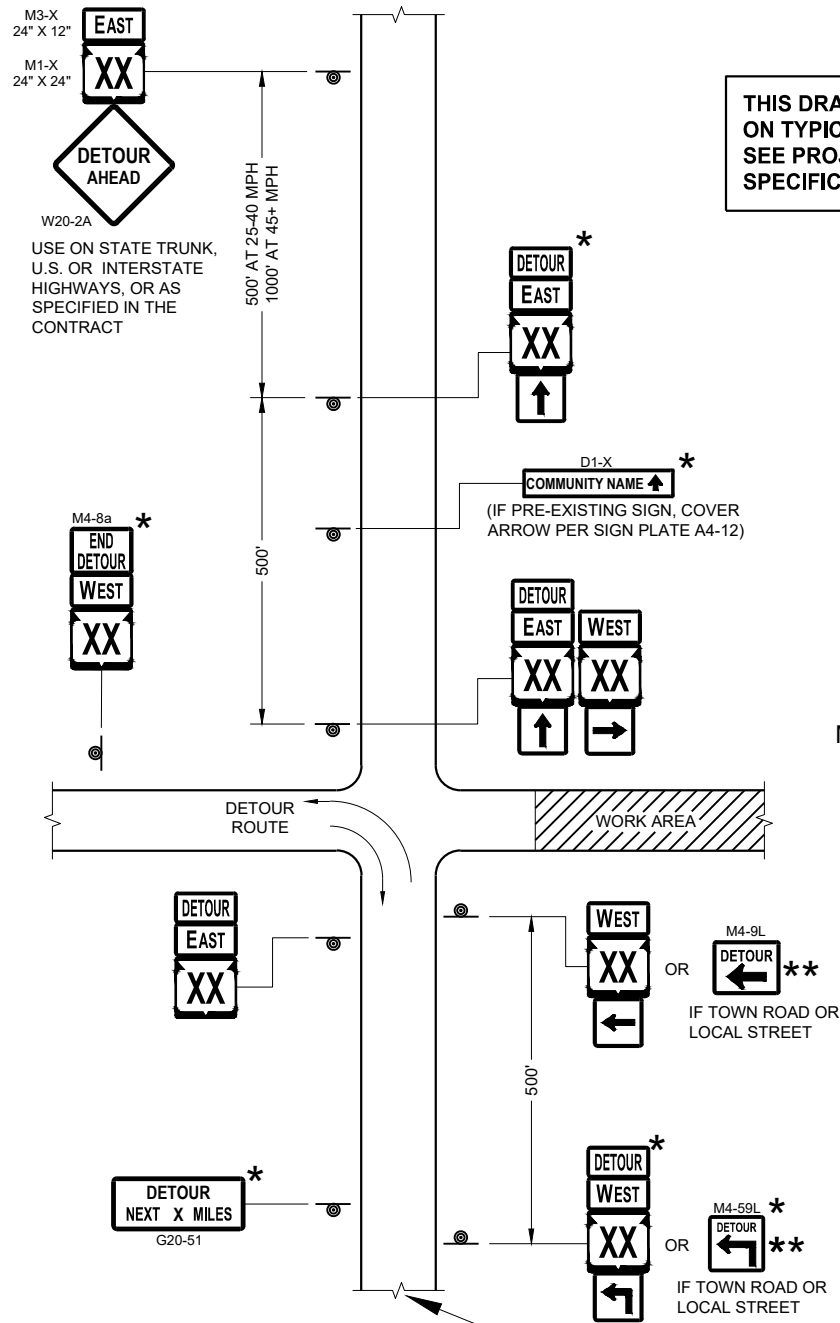
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- 2 THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
- 3 FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".
- 4 FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".
- 5 FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.
- 6 INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- 7 "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

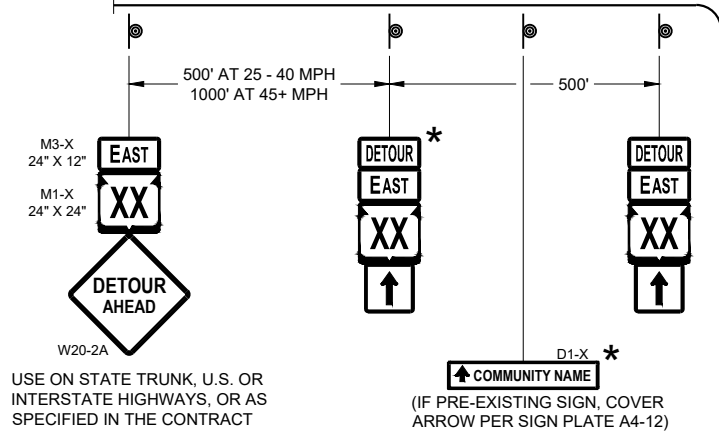
APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 76
FHWA



SEE SPECIFIC PROJECT DETOUR
SIGNING DETAIL SHEETS AND
DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

THIS DRAWING PROVIDES GENERAL GUIDANCE
ON TYPICAL DETOUR SIGN LAYOUT AND SPACING.
SEE PROJECT DETOUR SIGNING SHEETS FOR
SPECIFIC DETAILS FOR EACH PROJECT.

MATCH POINT



DETAIL F
DETOUR SIGNING

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST M4 - 8
- DETOUR WEST M3 - X
- DETOUR AHEAD M1 - 4 OR M1 - 6 OR M1 - 5A
- DETOUR NEXT X MILES M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

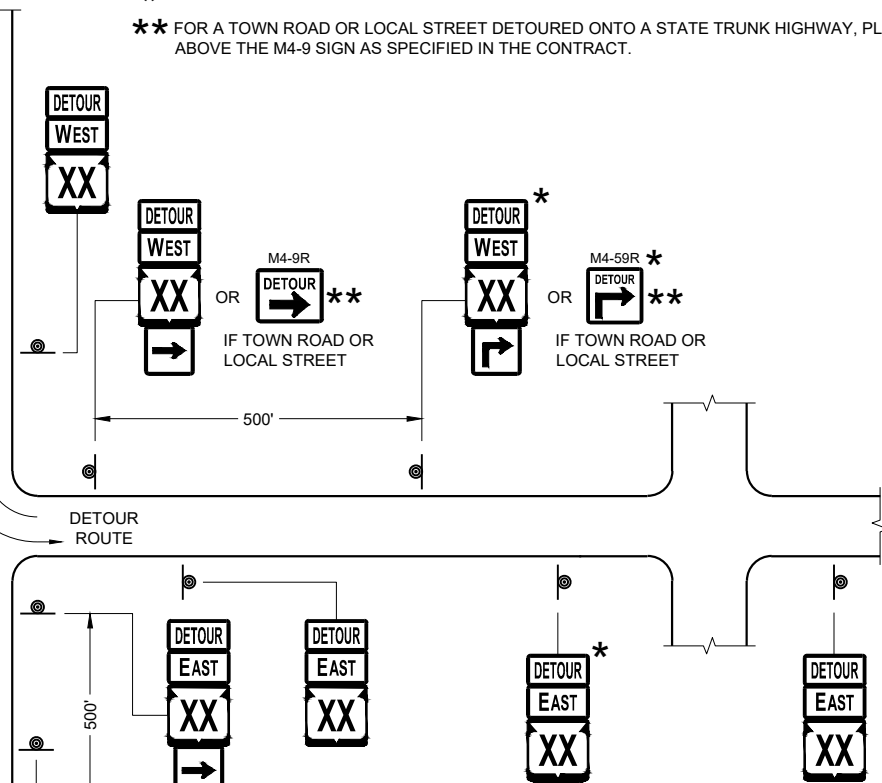
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

- * OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.
- ** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

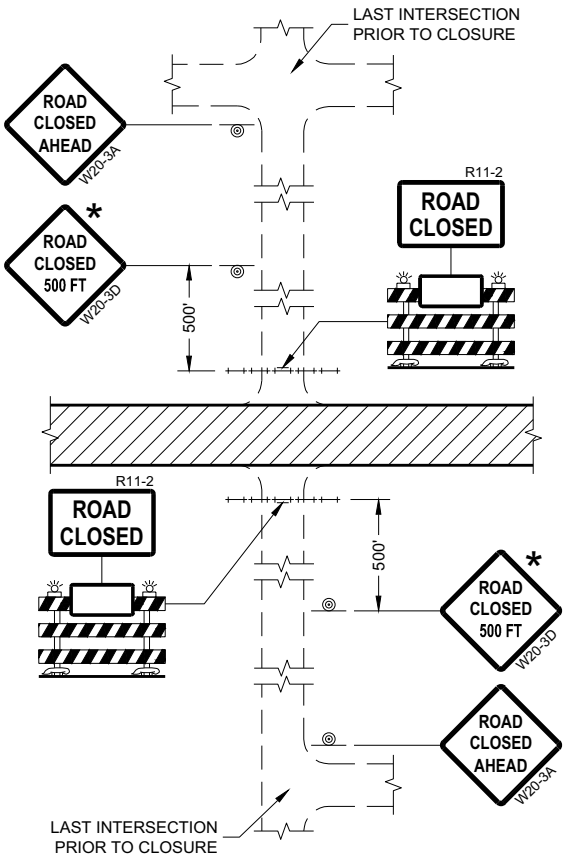


PLACE SIGNS BEYOND INTERSECTIONS
WITH STATE OR COUNTY TRUNK
HIGHWAYS OR AT 4 MILE MAXIMUM
SPACING (4 BLOCKS IF URBAN AREA)

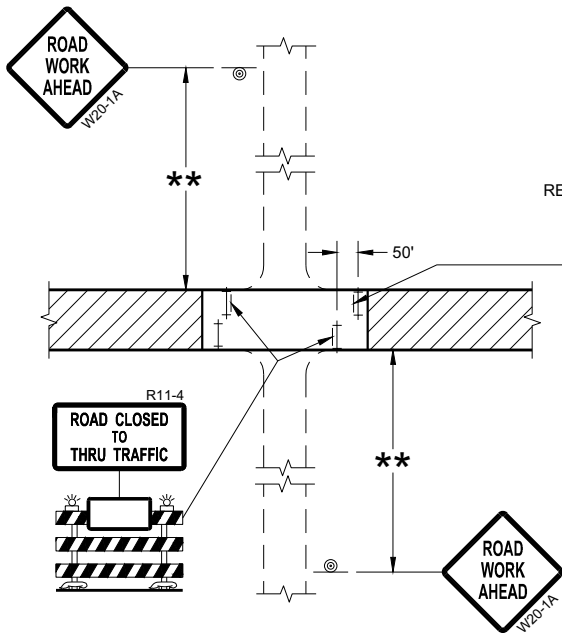
DETOUR SIGNING
FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

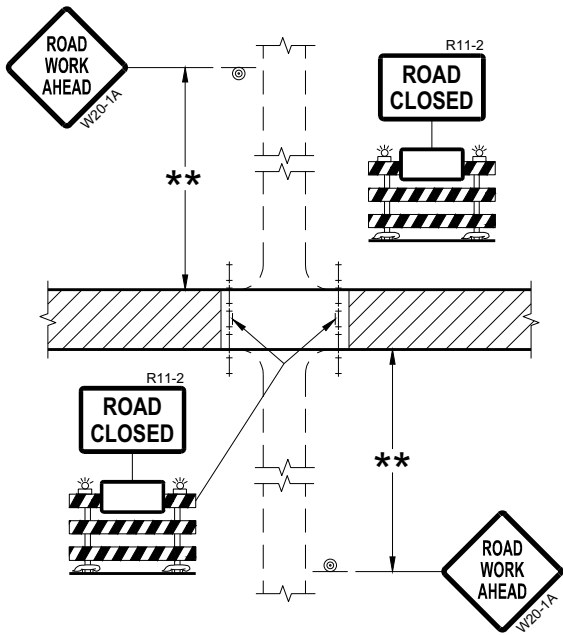
APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 77
FHWA



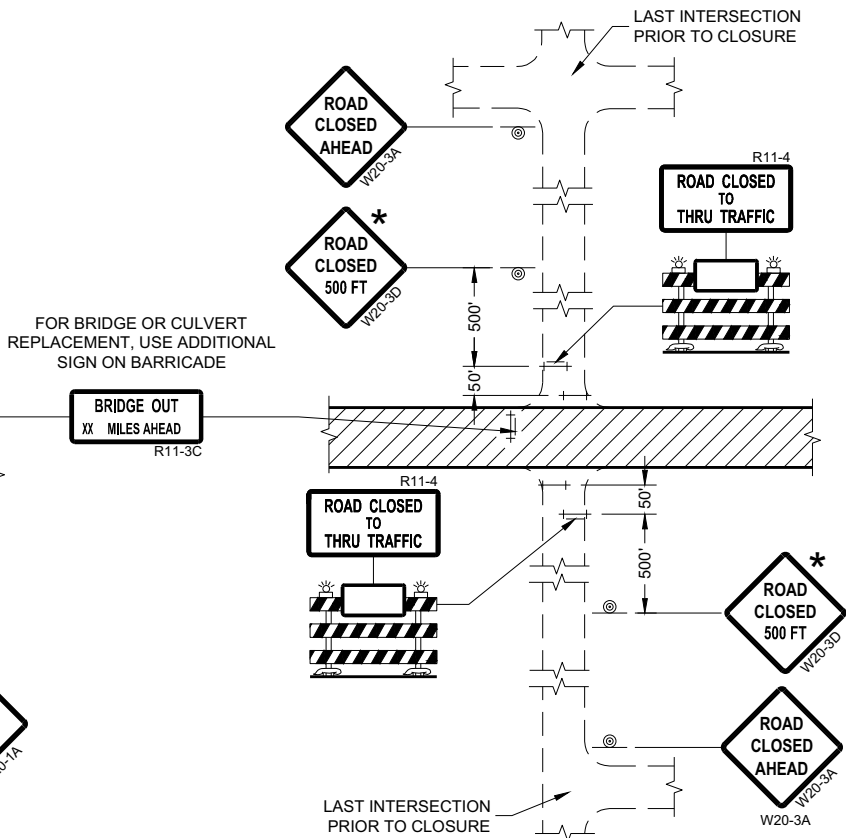
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

- * OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.
- ** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

**BARRICADES AND SIGNS
FOR
SIDEROAD CLOSURES**

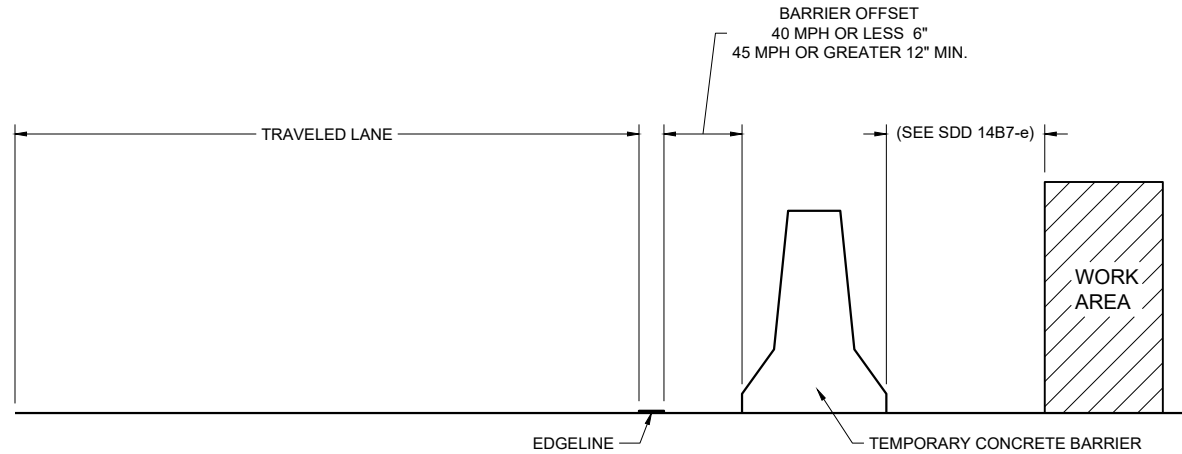
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 78
FHWA

SDD 15C08-23a



SDD 15C08-23a



TEMPORARY BARRIER OFFSET FROM EDGE LINE

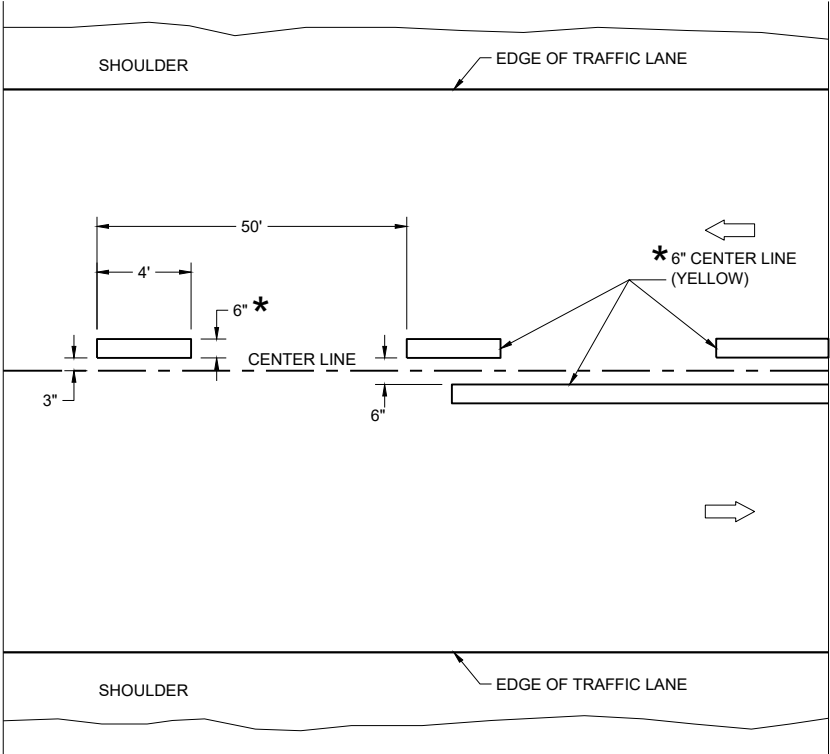
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

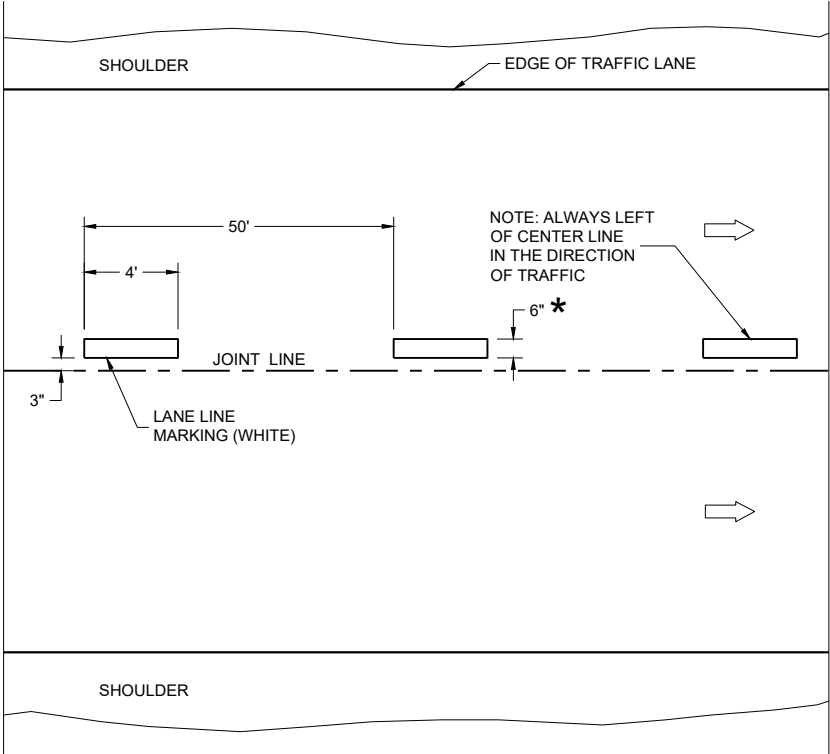
LEGEND

DIRECTION OF TRAFFIC

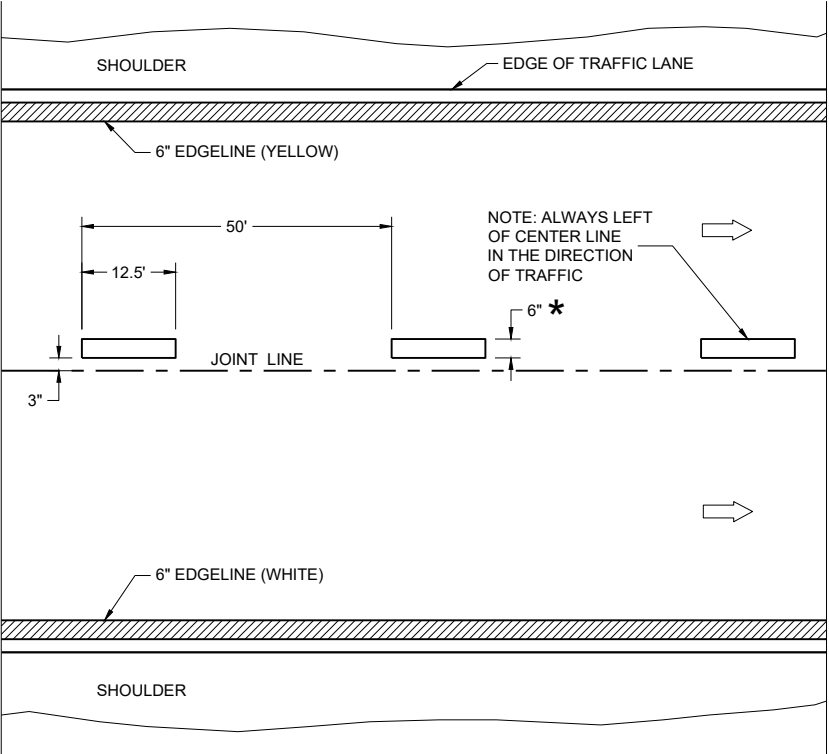
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



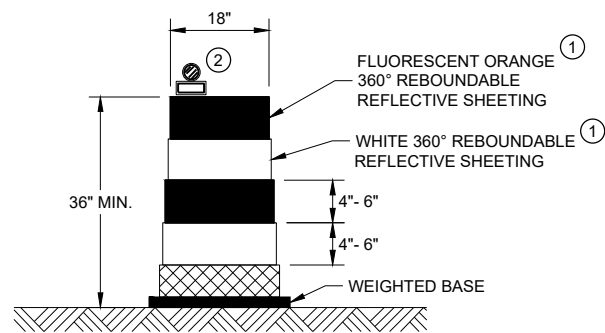
ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

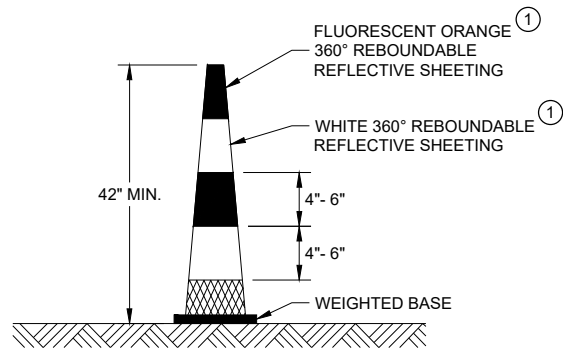
TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Jeannie Silver Statewide Pavement Marking Engineer
FHWA	



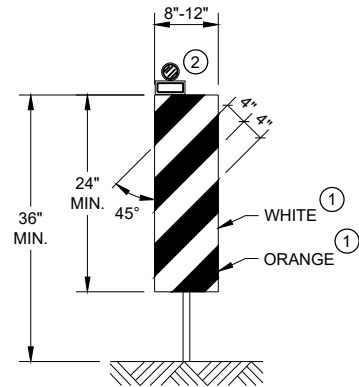
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



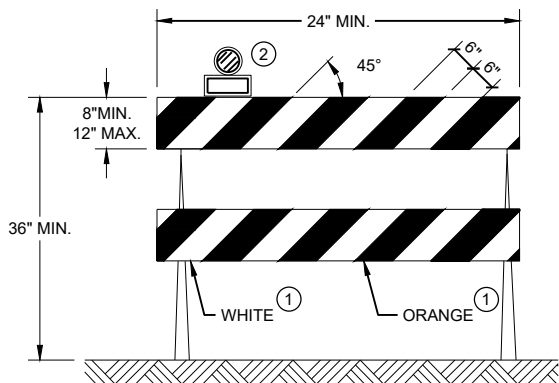
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS
BALLAST WIDTHS
RANGE FROM 14"-20"



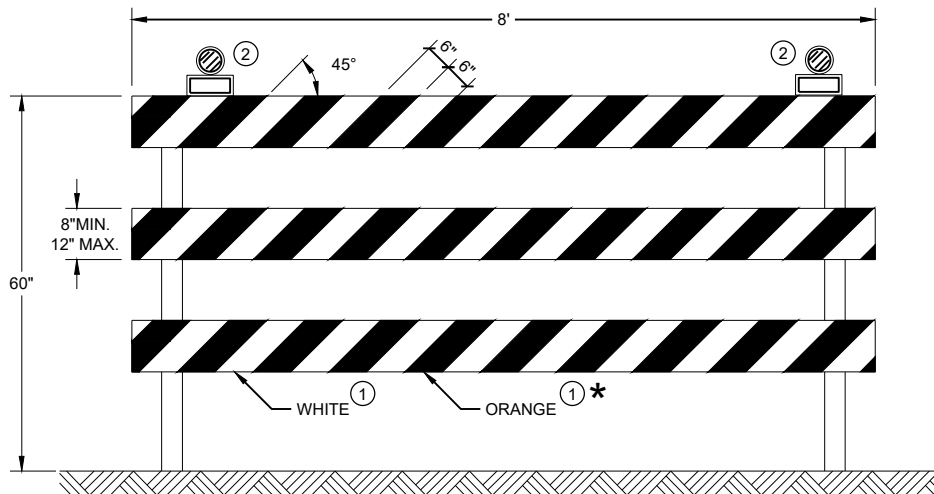
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

GENERAL NOTES

- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 81
FHWA

LEGEND

-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  TEMPORARY PORTABLE RUMBLE STRIP ARRAY
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND LOCATION OF ALL FLAGGERS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

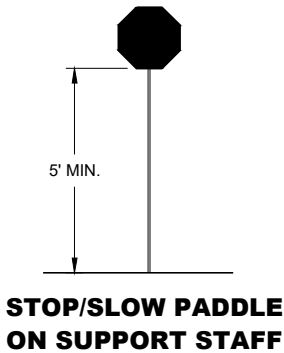
FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- ① FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

- UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER
- ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.
- INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.
- PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.
- DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

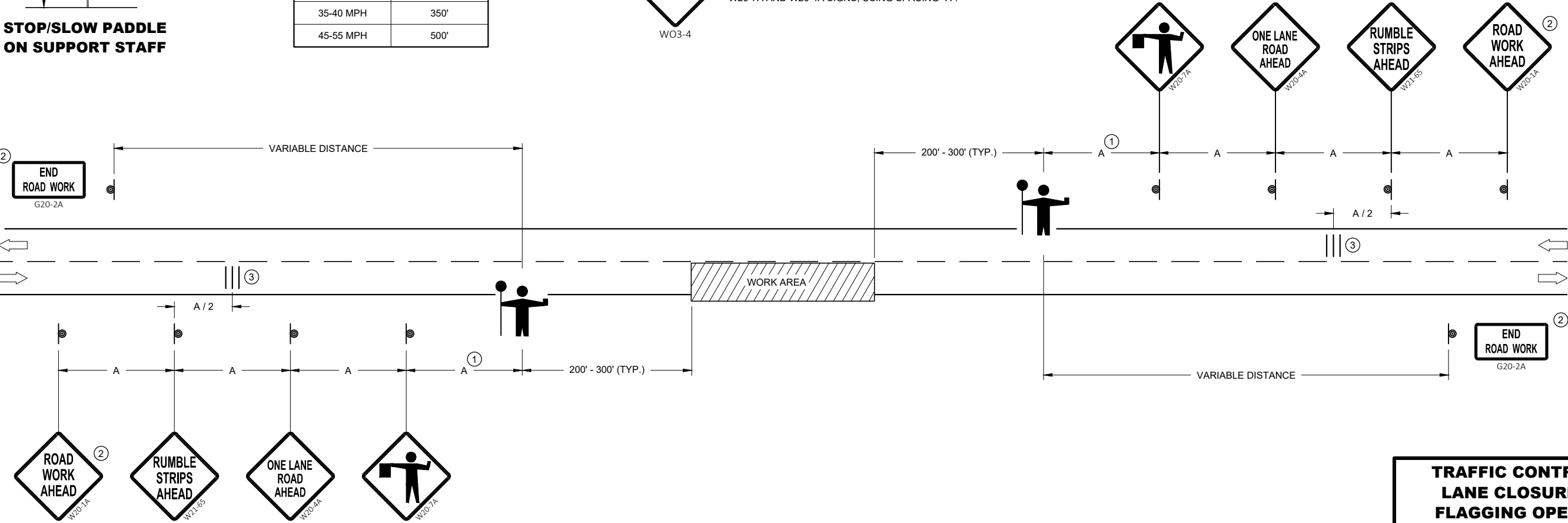


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



USE OF W03-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".

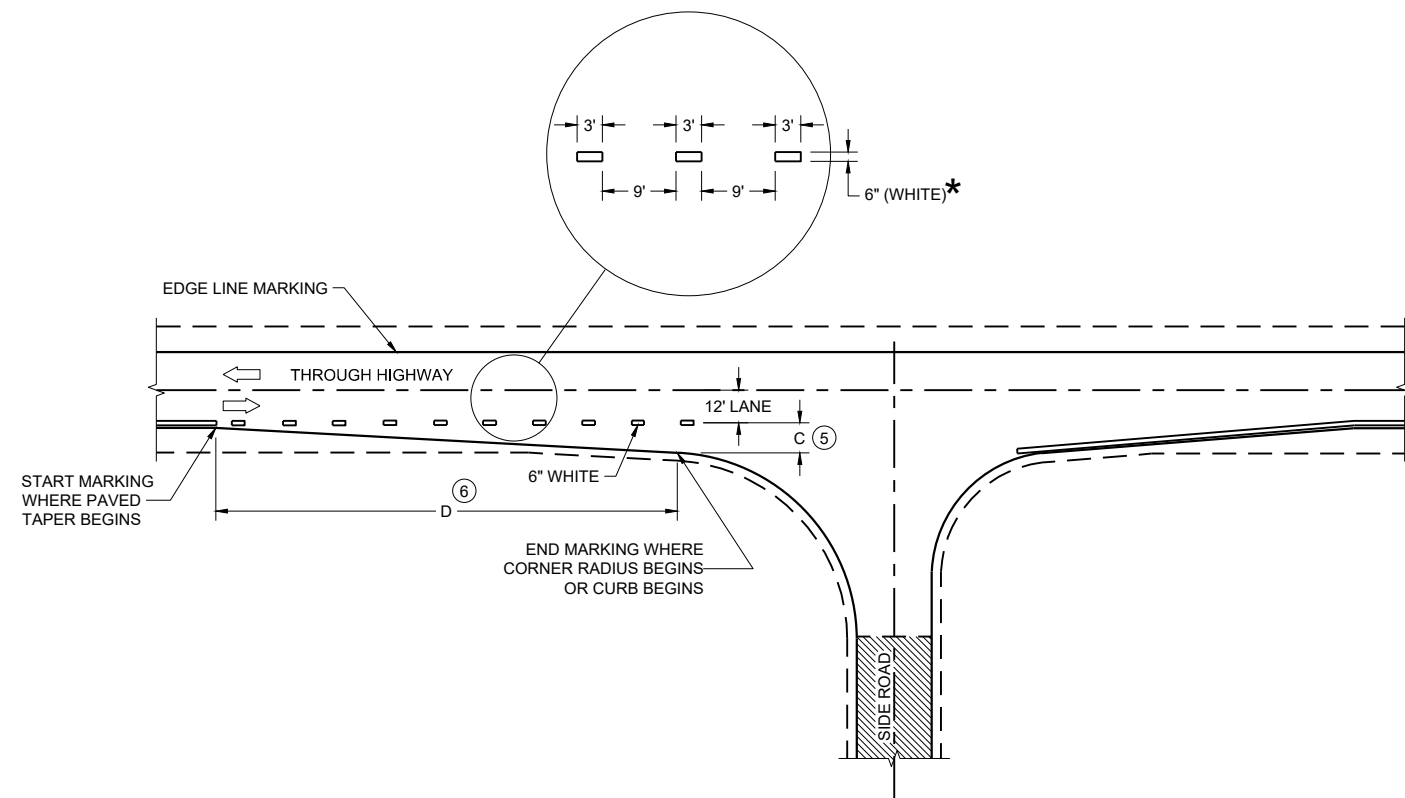


**TRAFFIC CONTROL FOR
LANE CLOSURE WITH
FLAGGING OPERATION**

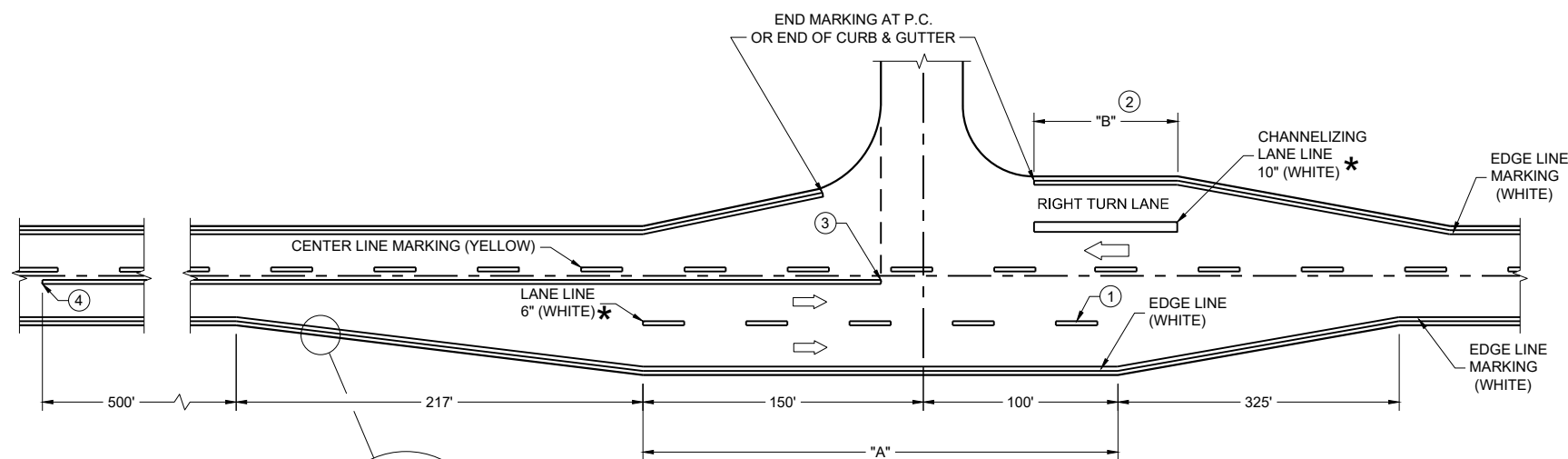
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 82

FHWA



MINOR INTERSECTION



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

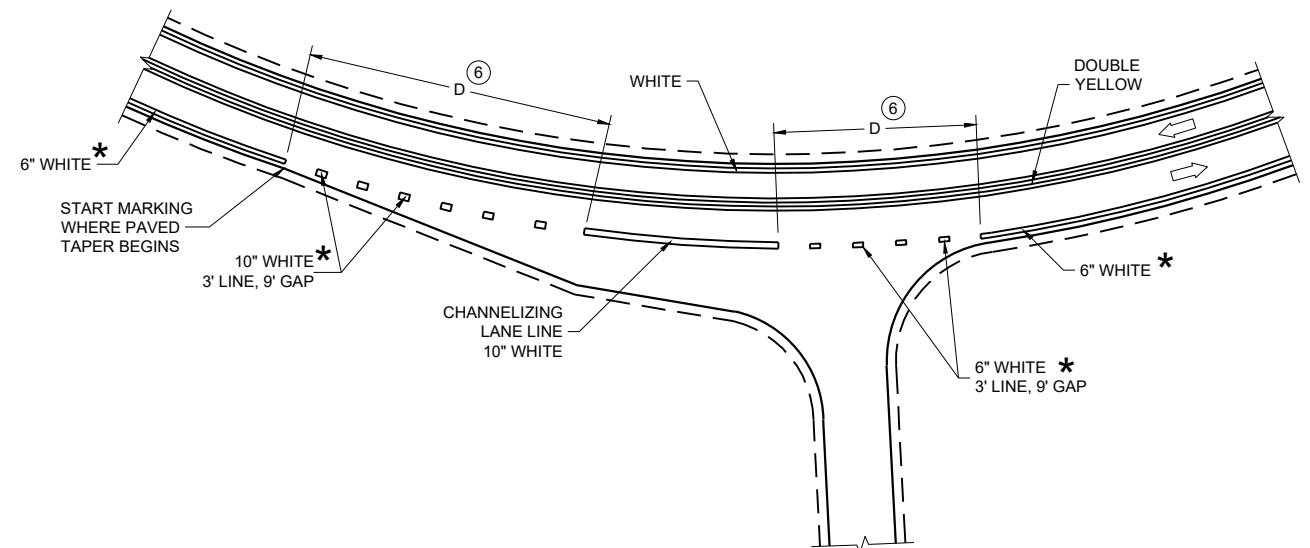
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
- ④ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
- ⑤ WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
- ⑥ WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

➡ DIRECTION OF TRAVEL

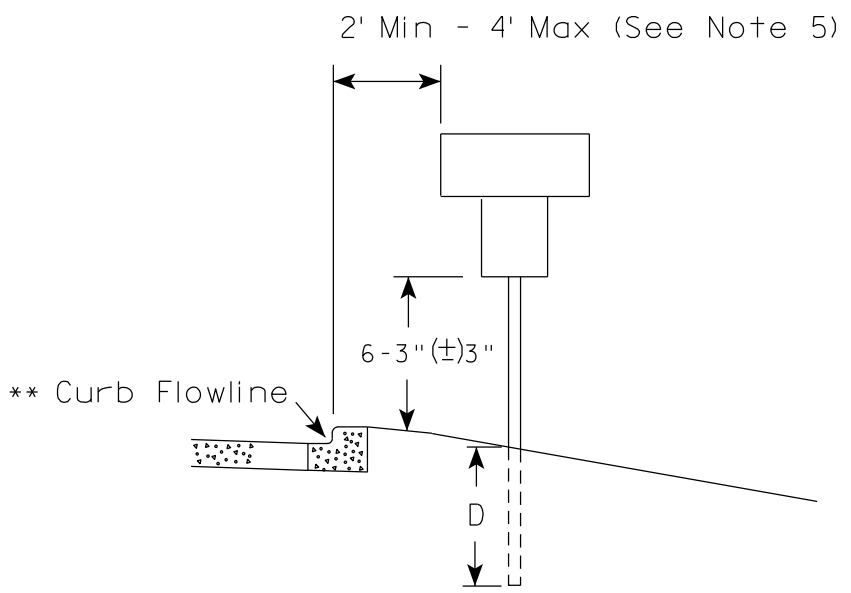
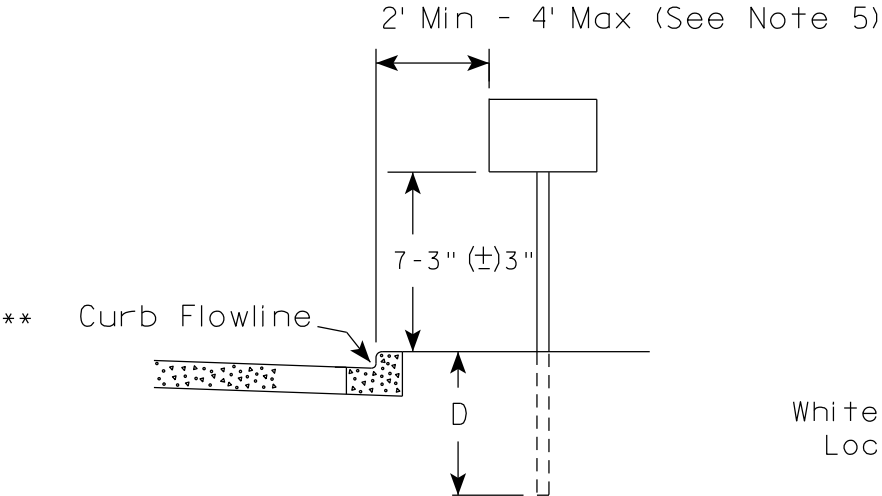


INTERSECTION ON OUTSIDE OF CURVE

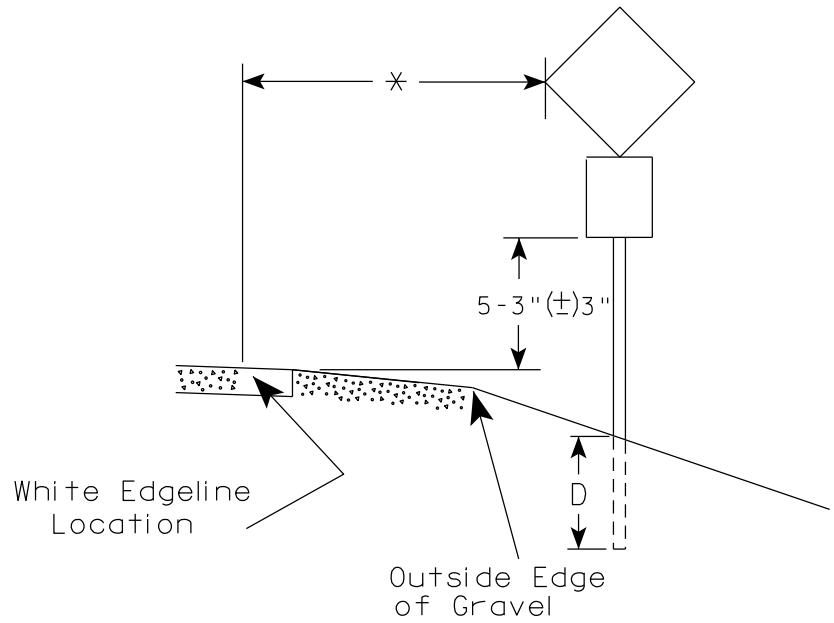
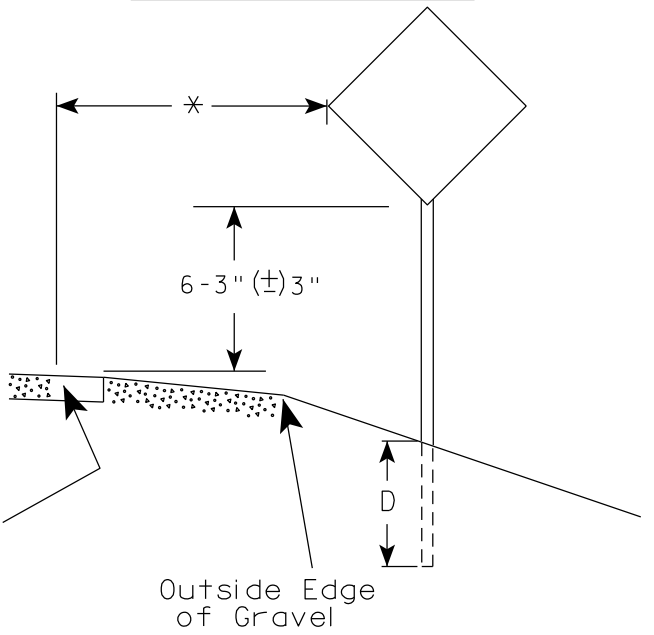
PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

URBAN AREA



RURAL AREA (See Note 2)



POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the Engineer.

* * The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

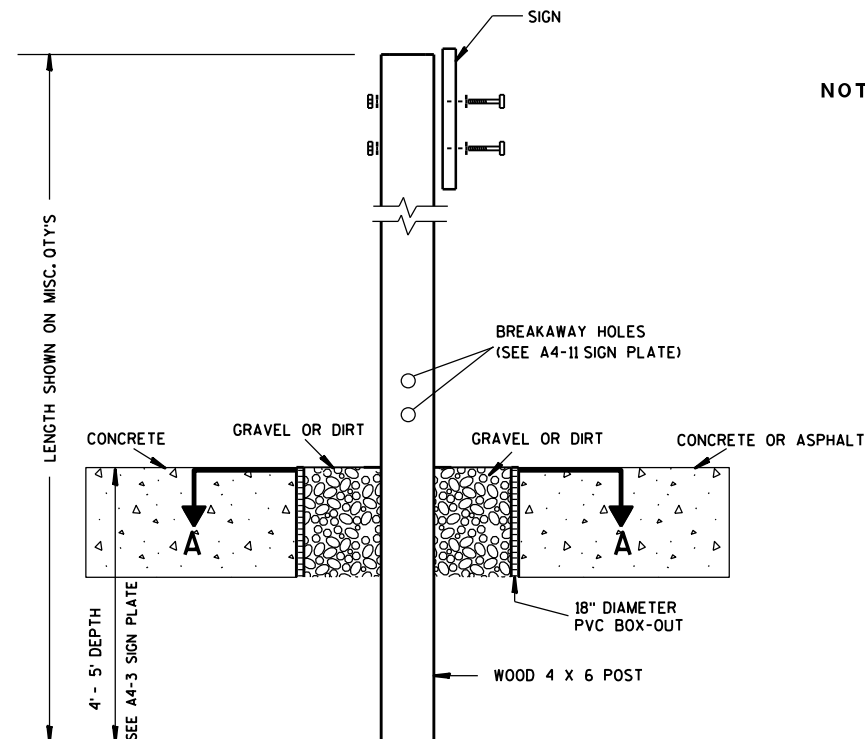
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

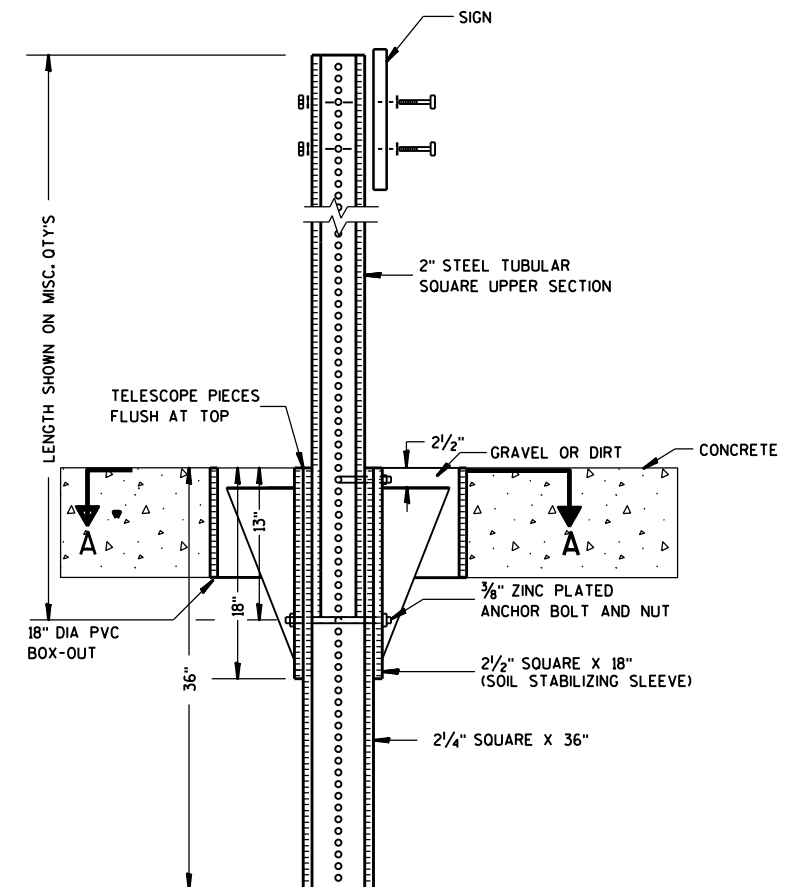
DATE 12/6/23 PLATE NO. A4-3.23



ELEVATION VIEW

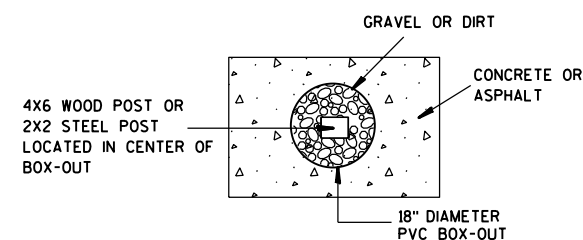
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- NOTES: 1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/27/14 PLAT 85 A4-3B.1

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

GENERAL NOTES

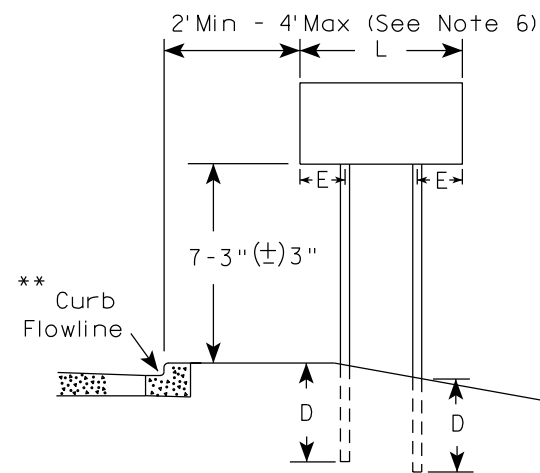
- For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
- See tables below for required number of posts.
- For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
- The (±) tolerance for mounting height is 3 inches.
- J-Assemblies are considered to be one sign for mounting height.
- Offset distance shall be consistent with existing signs or consistent throughout length of project.
- Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
- The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

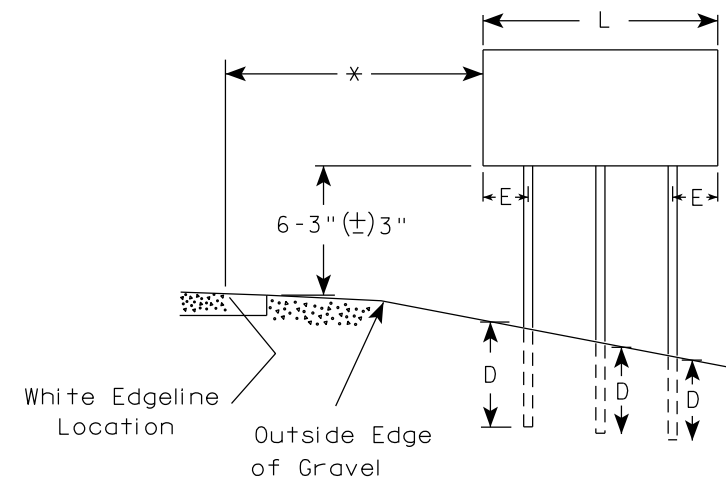
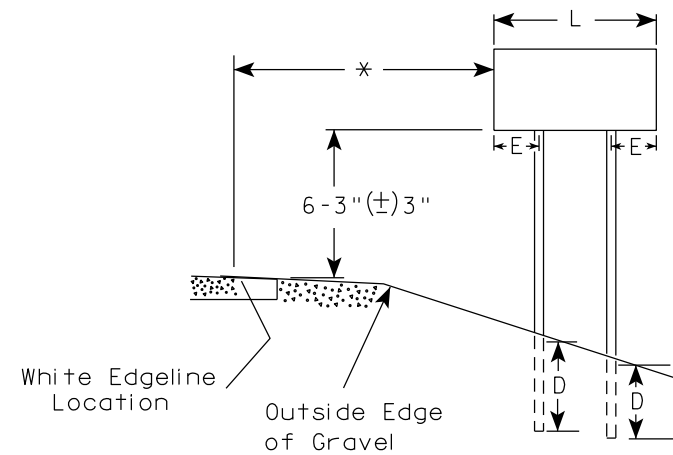
** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

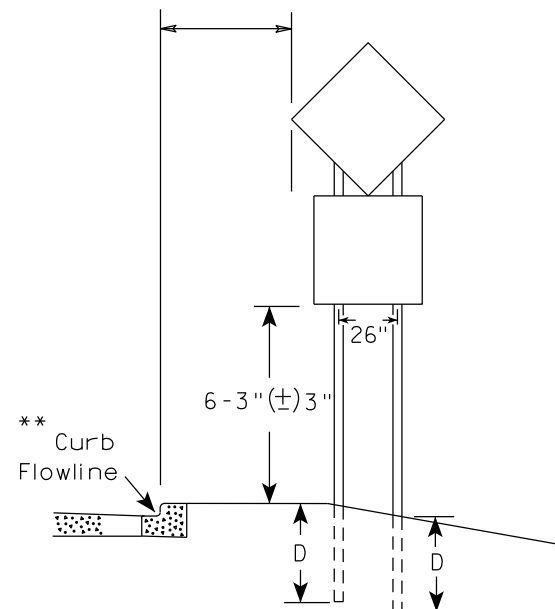
URBAN AREA



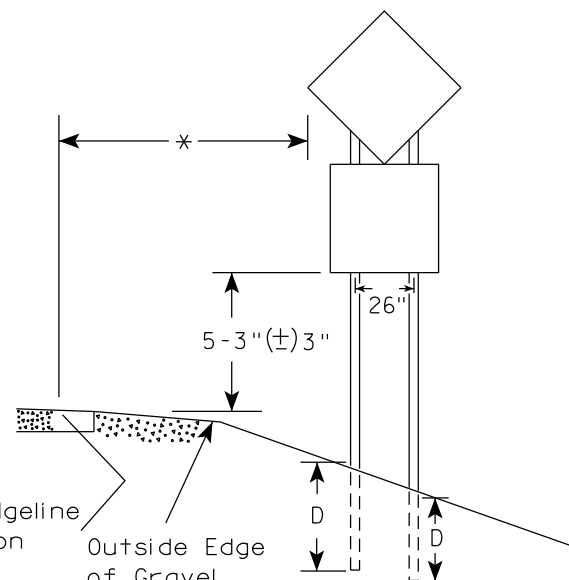
RURAL AREA (See Note 3)



2' Min - 4' Max (See Note 6)



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

POST EMBEDMENT DEPTH

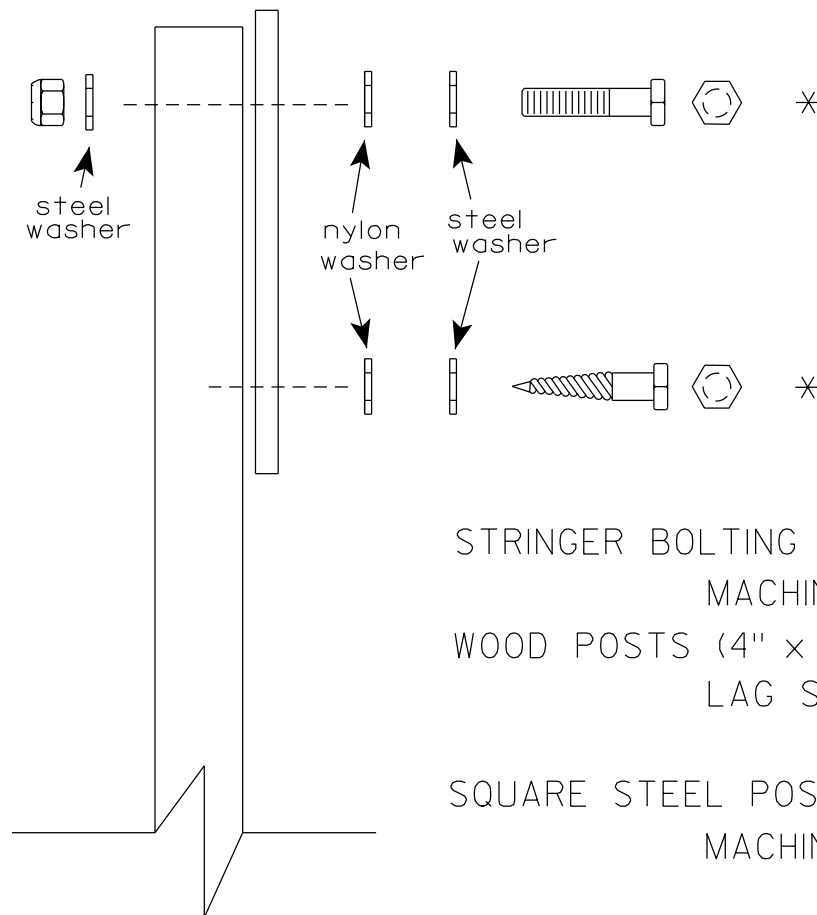
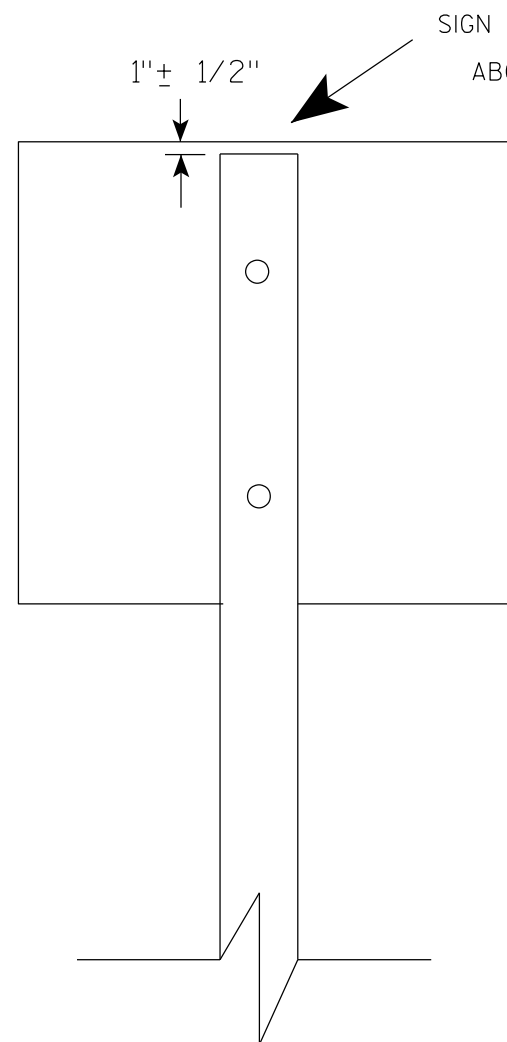
Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

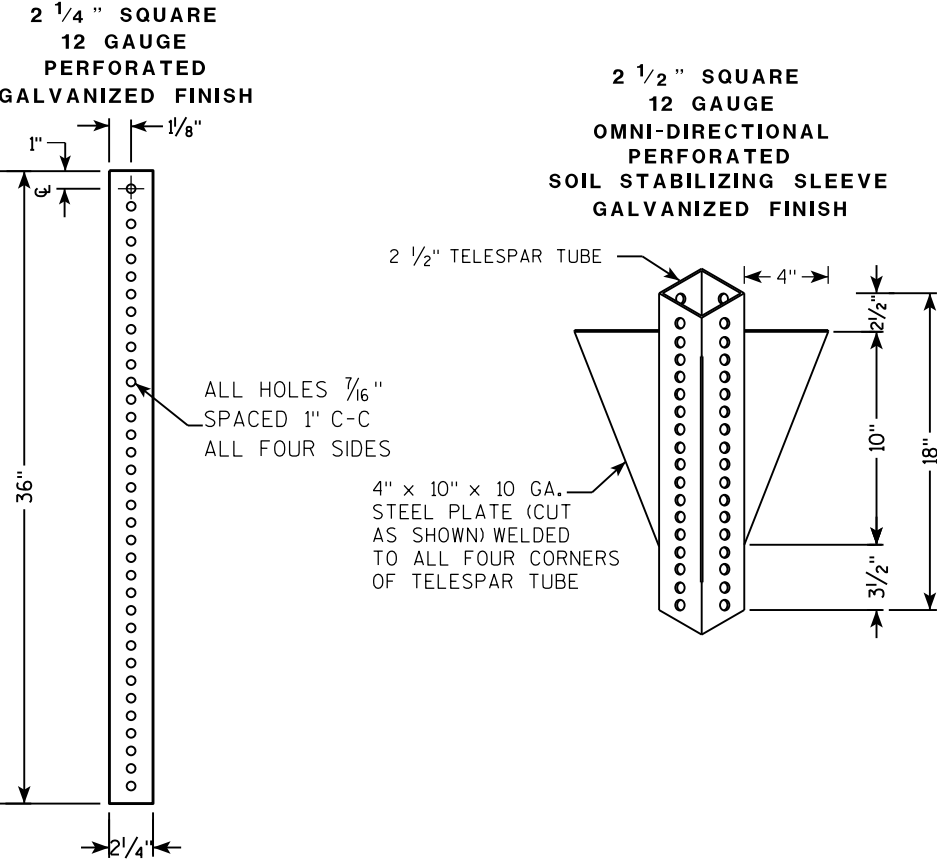
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
 - 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON

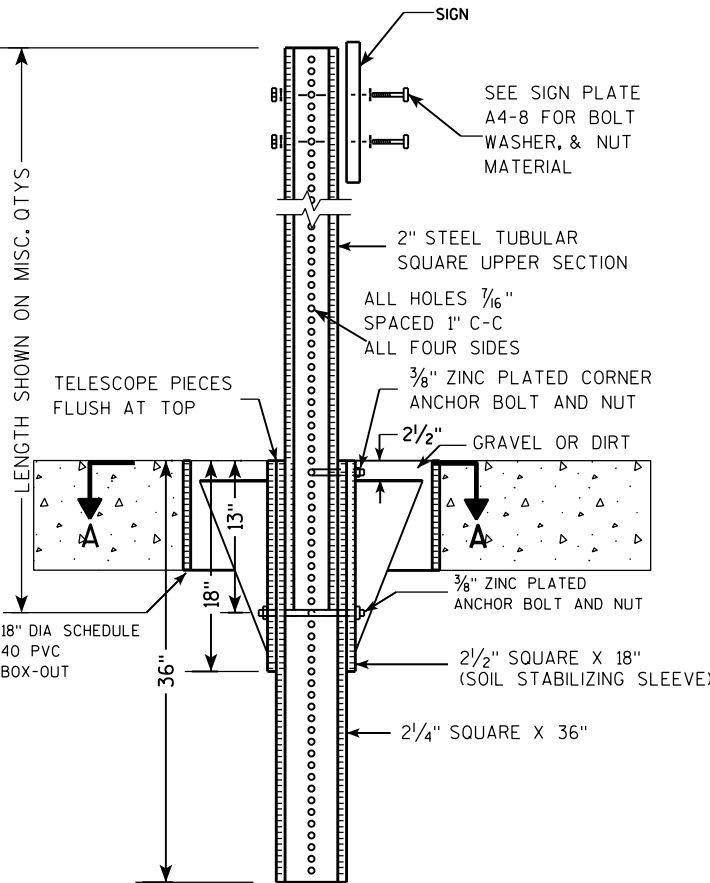
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 4/1/2020	PLATE NO. A4-8.9

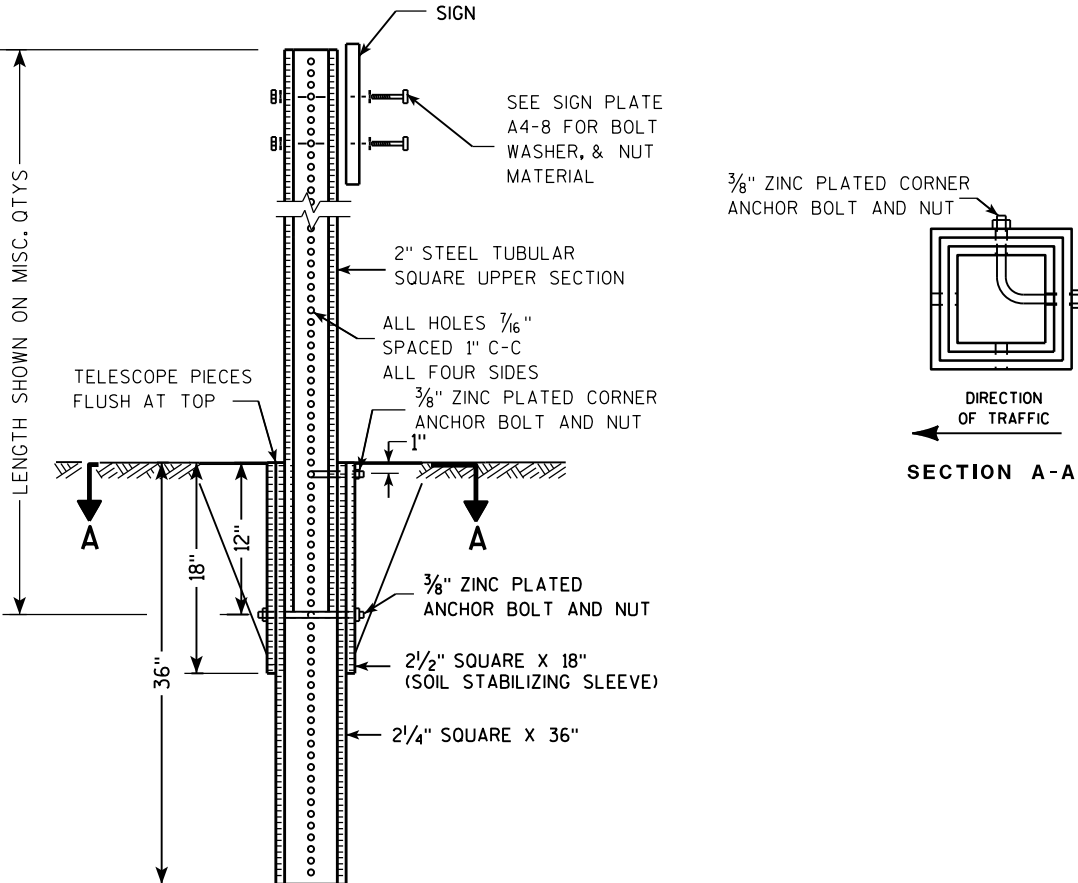
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)



Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

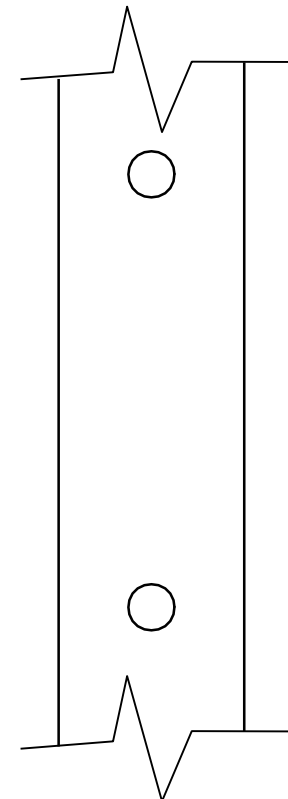
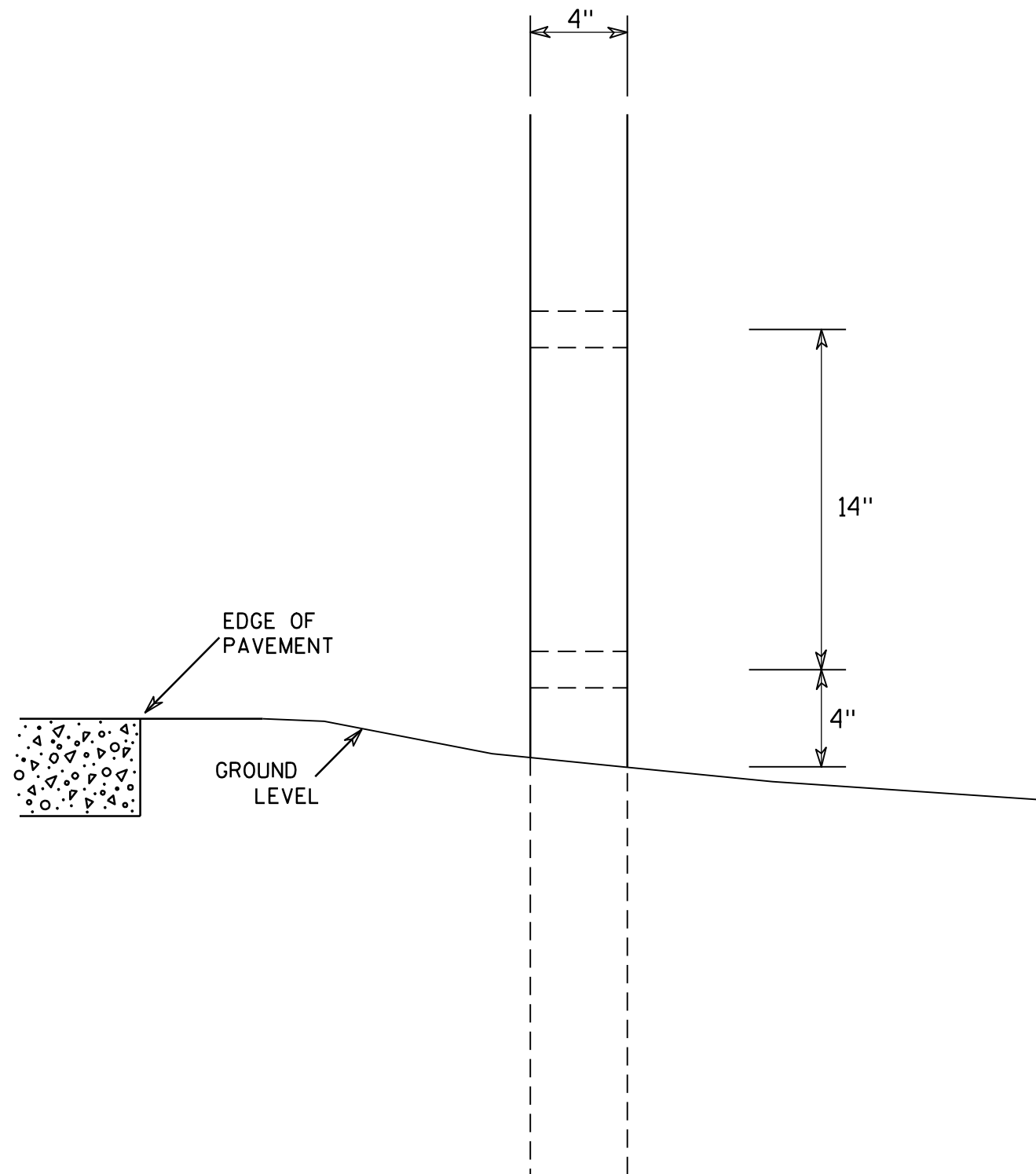
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLAT 88 14-9.9



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

HWY:

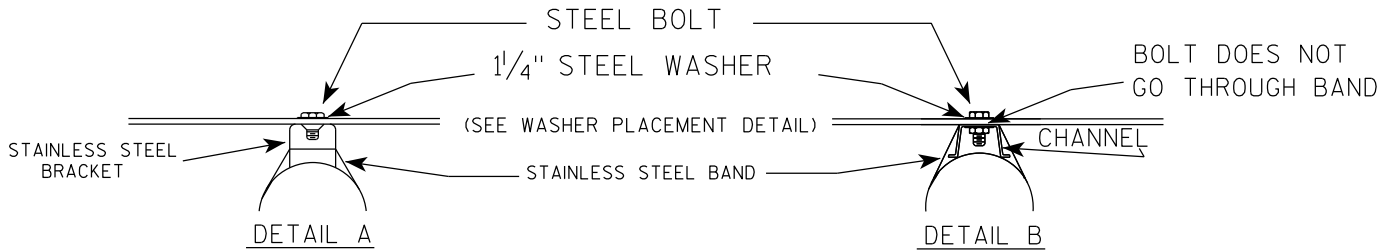
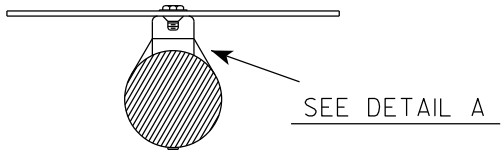
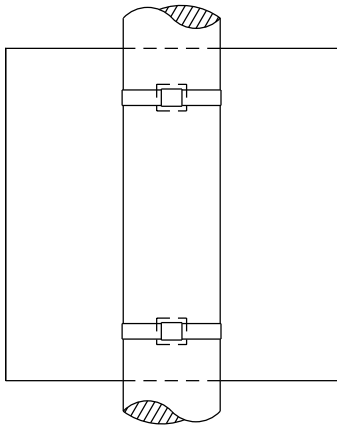
COUNTY:

SHEET NO: 89

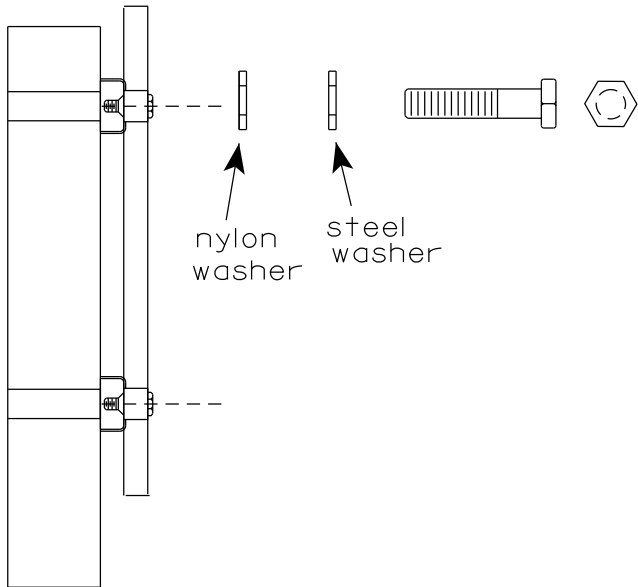
E

BANDING

SINGLE SIGN



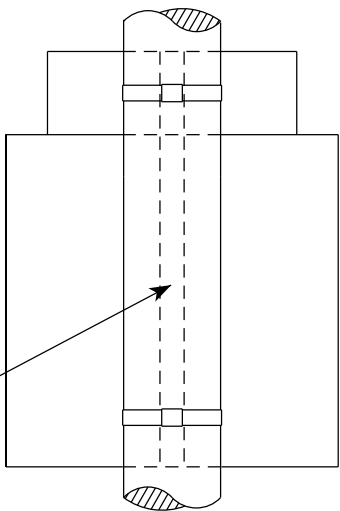
WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET

"J" ASSEMBLY



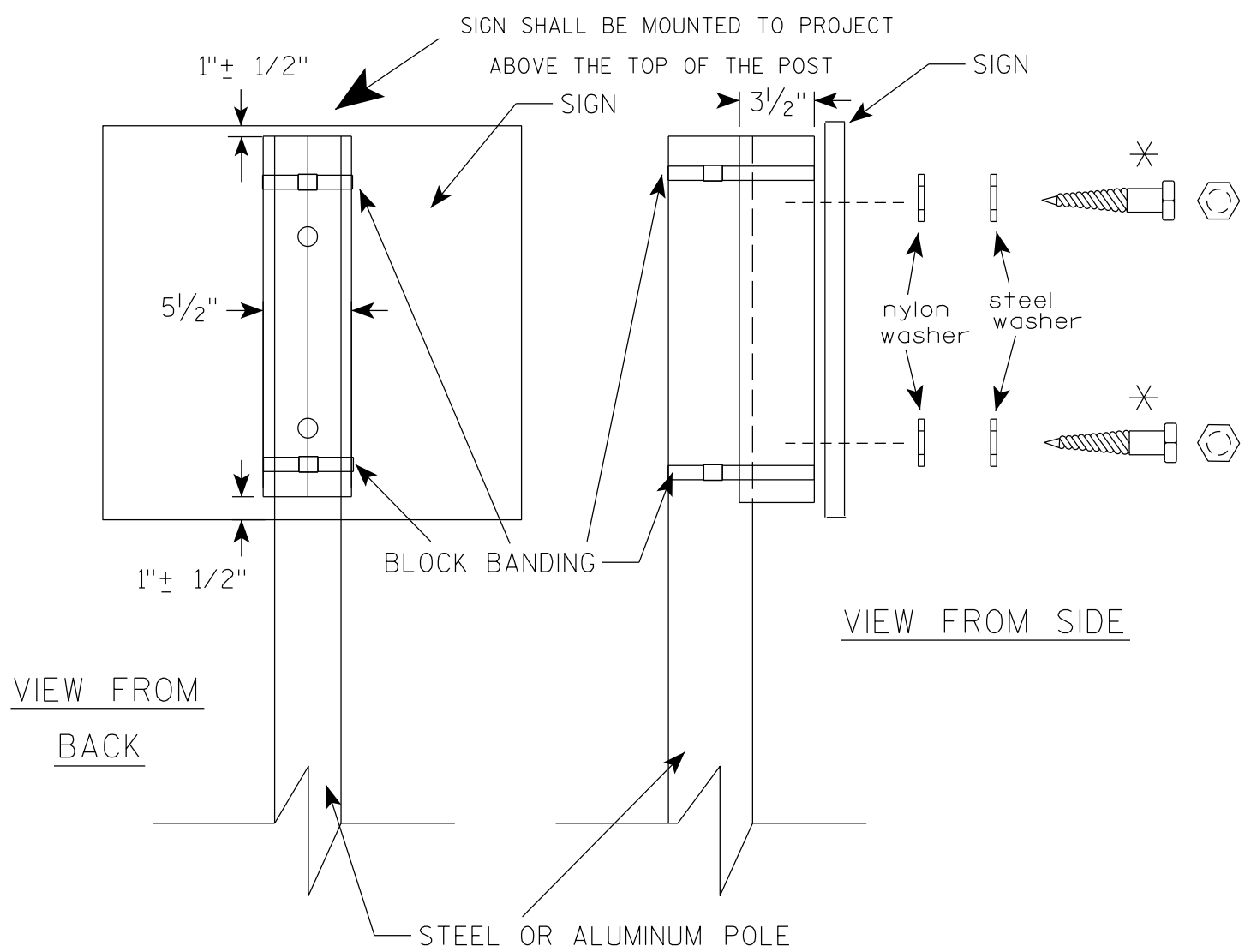
SEE DETAIL B

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
- a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
 - b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

STANDARD SIGN
SIGN BANDING DETAILS

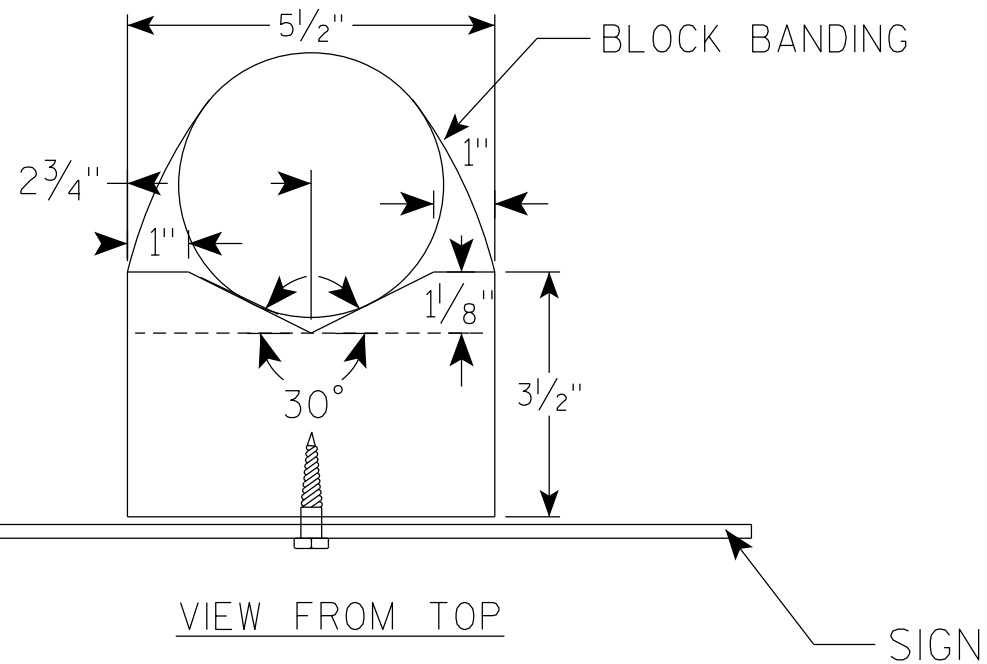
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/10/19 PLATE NO. A5-9.4



VIEW FROM
BACK

VIEW FROM SIDE



VIEW FROM TOP

GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WISDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, $\frac{3}{4}$ " WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORMALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
 - b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✱ LAG BOLTS SHALL BE $\frac{3}{8}$ " X $2\frac{1}{2}$ "

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

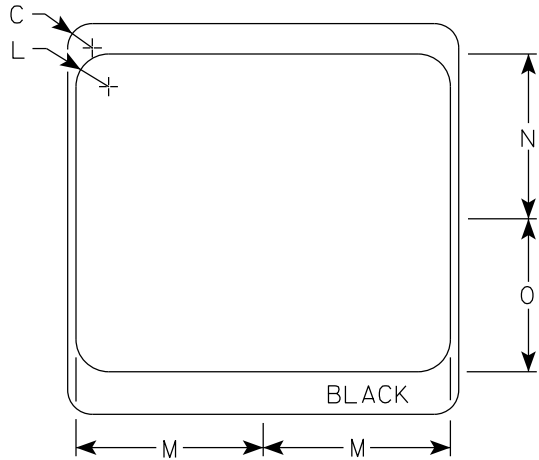
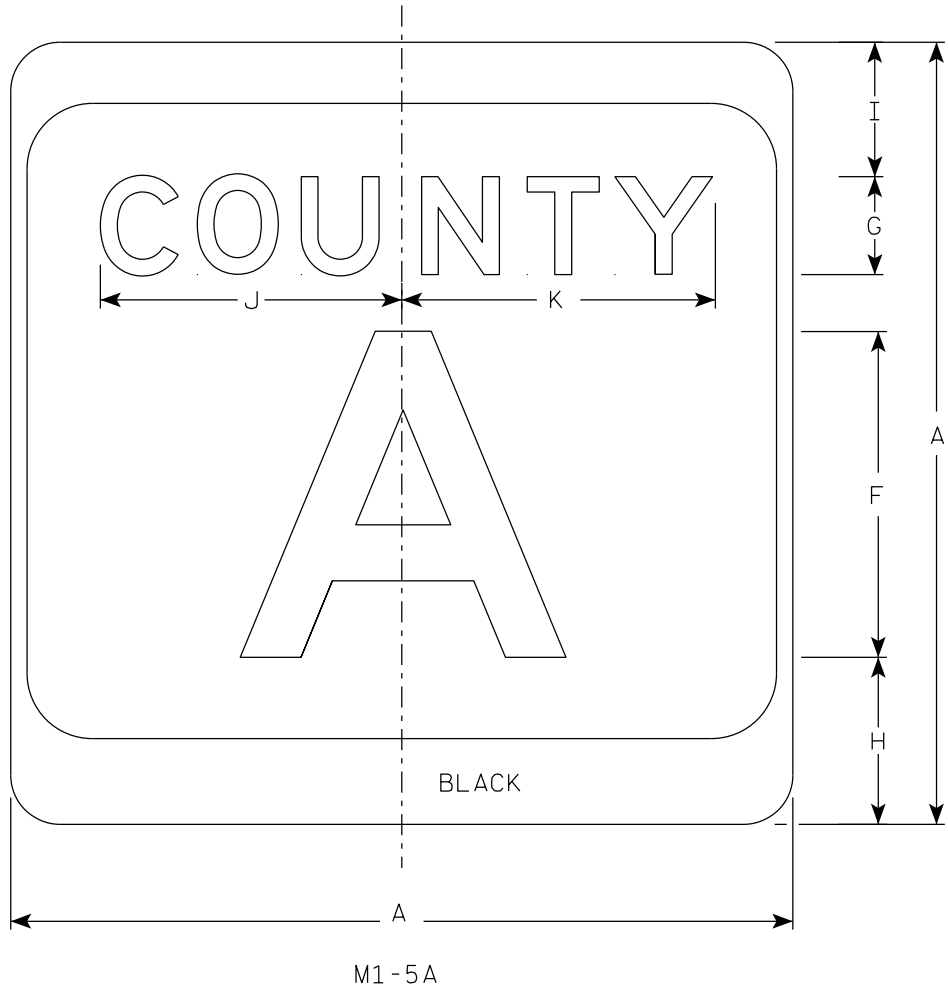
DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

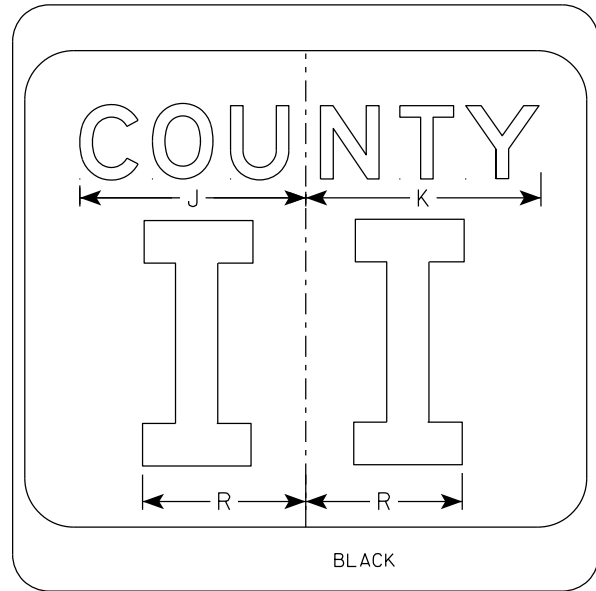
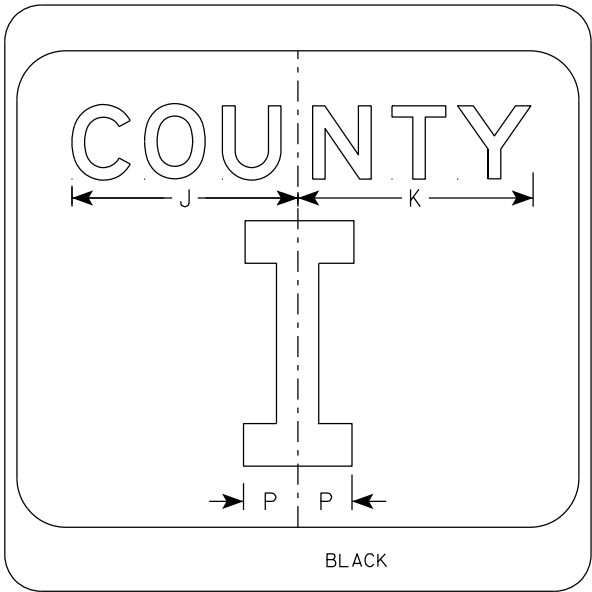
SHEET NO: 91

E

7



- NOTES
- Sign is Type II - Type H Reflective
 - Color:
Background - White & Black
Message - Black
 - Message Series - see Note 4
 - Message Series E for 1 letter.
Message Series D for 2 letters unless message is too big then Series C.
Message Series C for 3 letters unless message is too big then Series B.
 - Substitute appropriate letters & optically center to achieve proper balance.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
2M	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

CTH MARKER

M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-5A.9

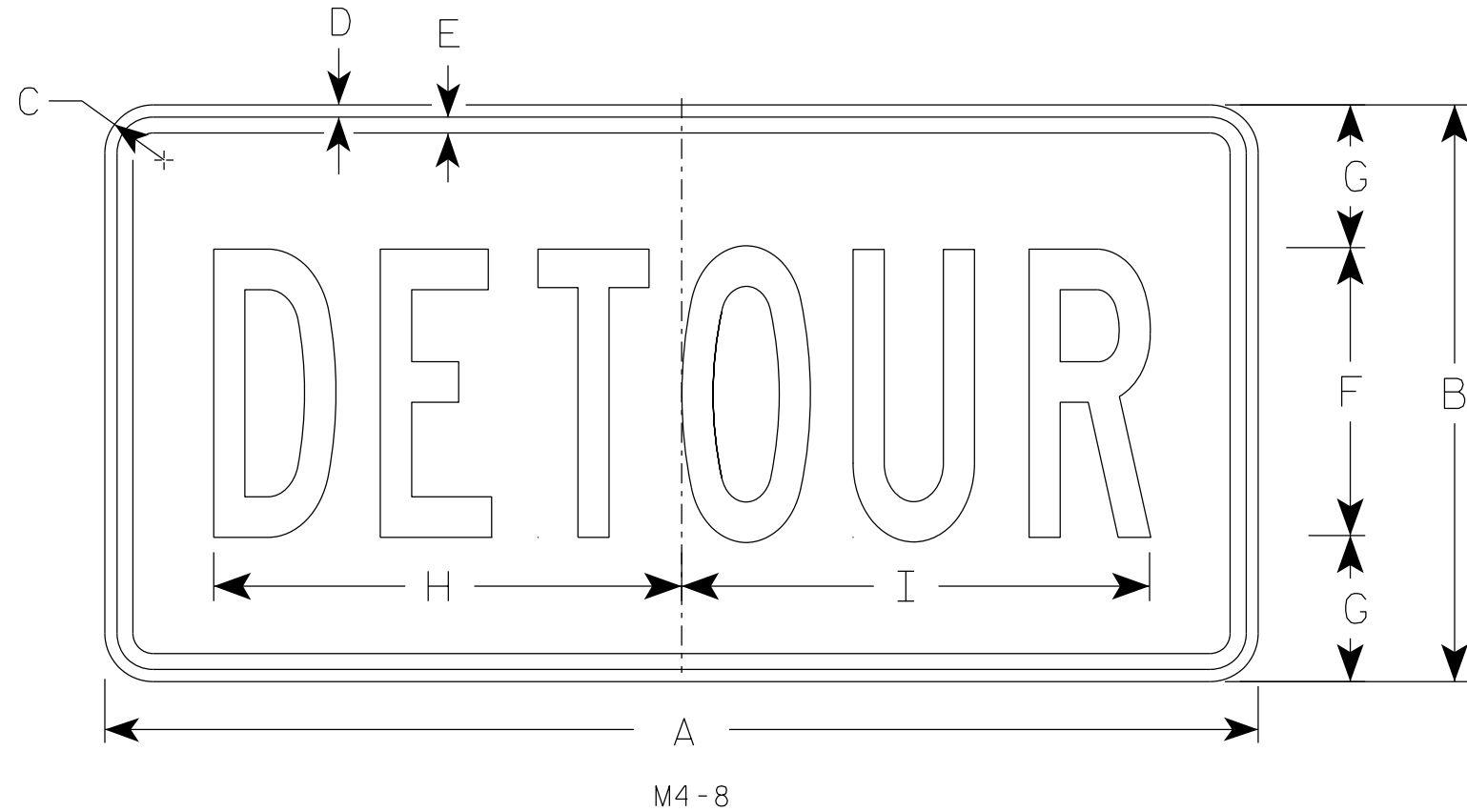
7

7

7

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - B
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
2M	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
5	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5

STANDARD SIGN

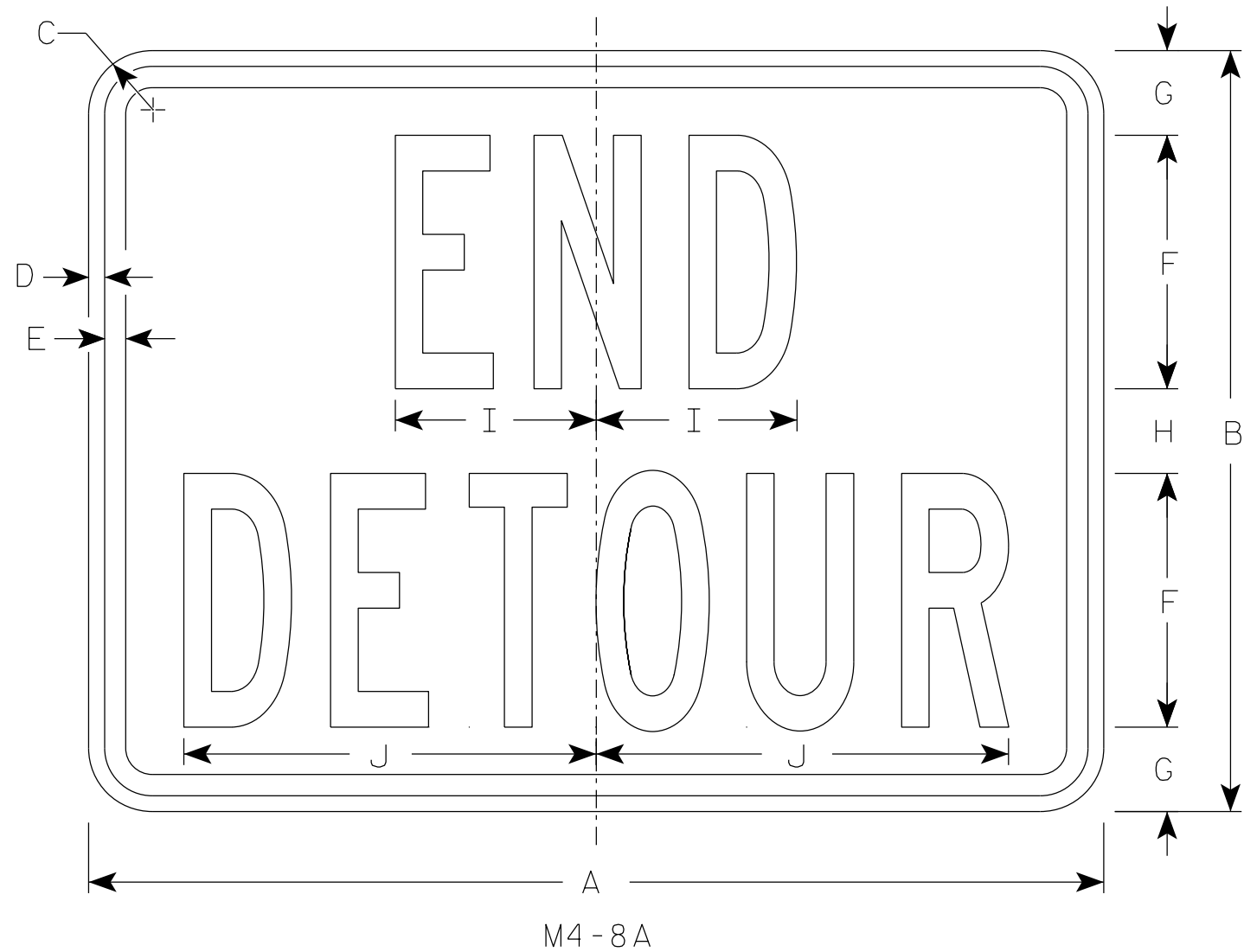
M4 - 8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

7



NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Message Series - B
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/2	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
2M	24	18	1 1/2	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/2	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4	30	24	1 1/2	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
5	30	24	1 1/2	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0

STANDARD SIGN

M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Rauch*
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

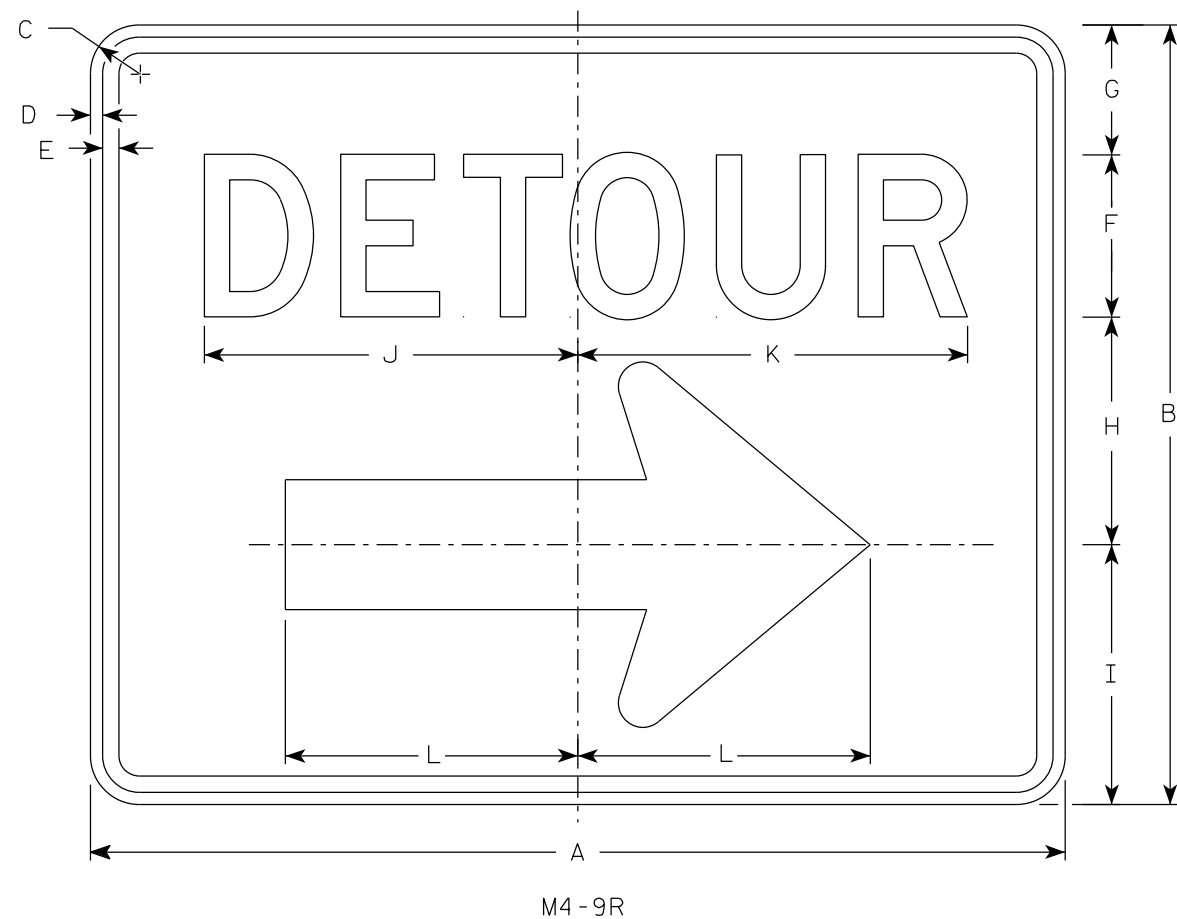
PROJECT NO:

HWY:

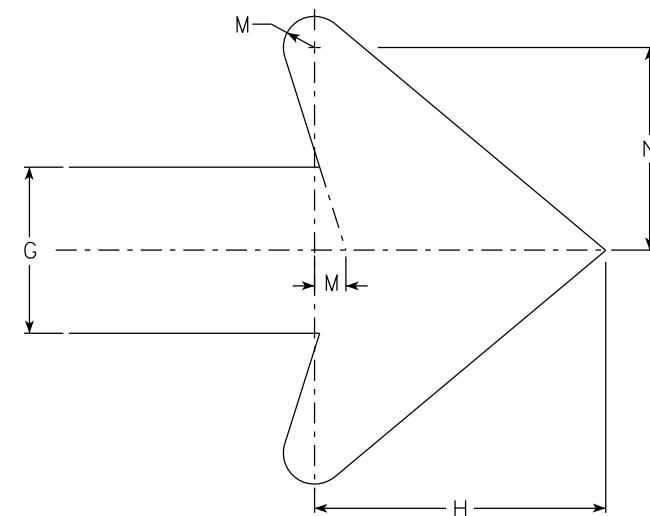
COUNTY:

SHEET NO: 94

E



- NOTES
1. Sign is Type II - Type F Reflective
 2. Color:
Background - Orange
Message - Black
 3. Message Series - D
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
 4. M4-9L is the same as M4-9R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/2	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
2M	30	24	1 1/2	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/2	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 7/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 7/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

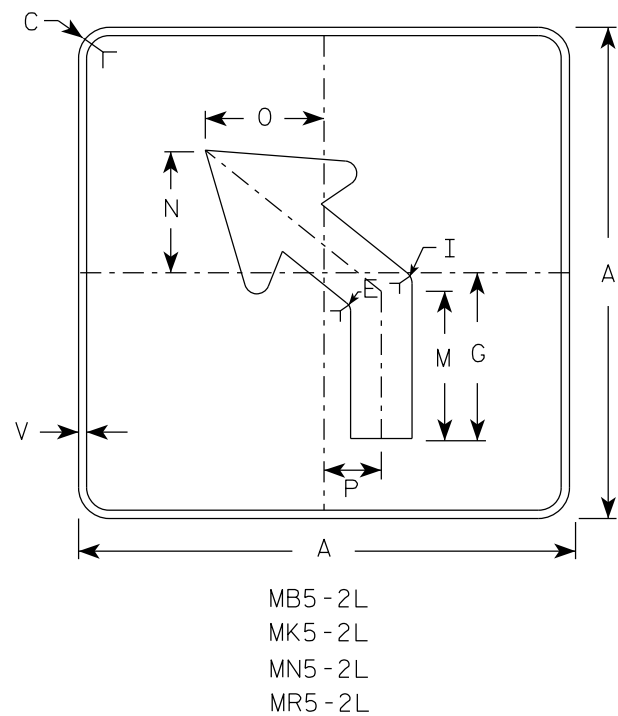
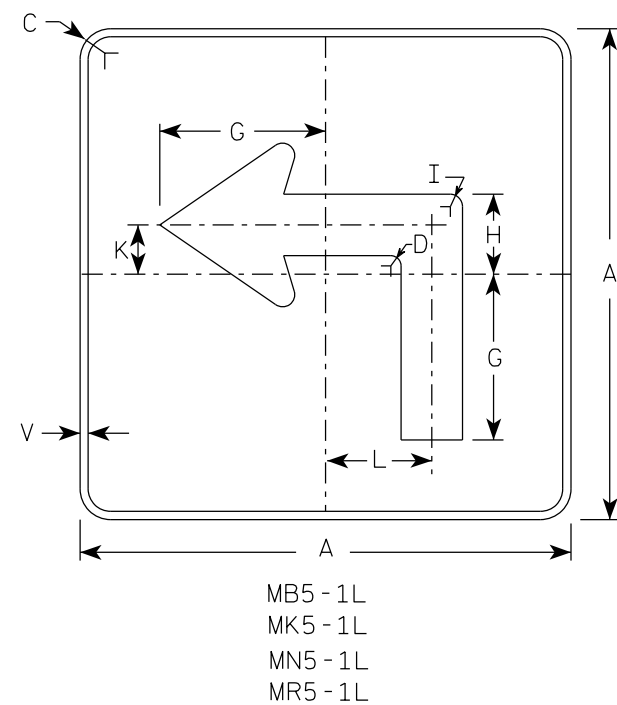
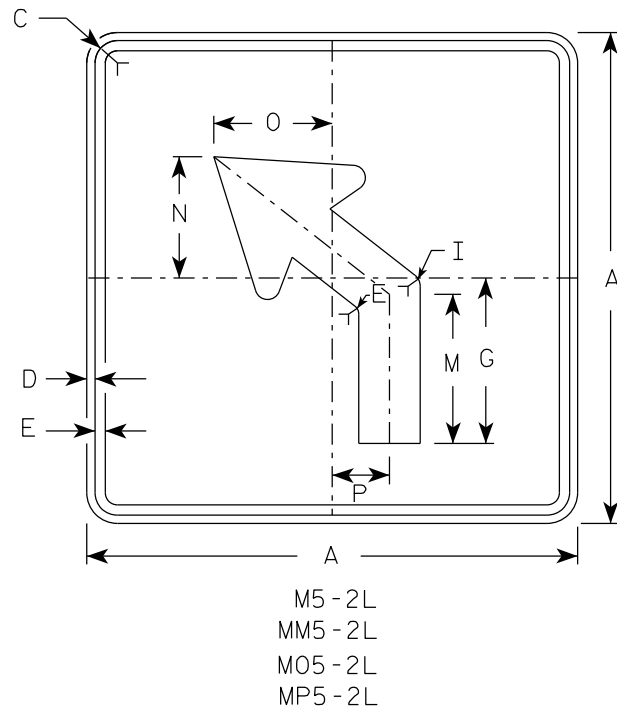
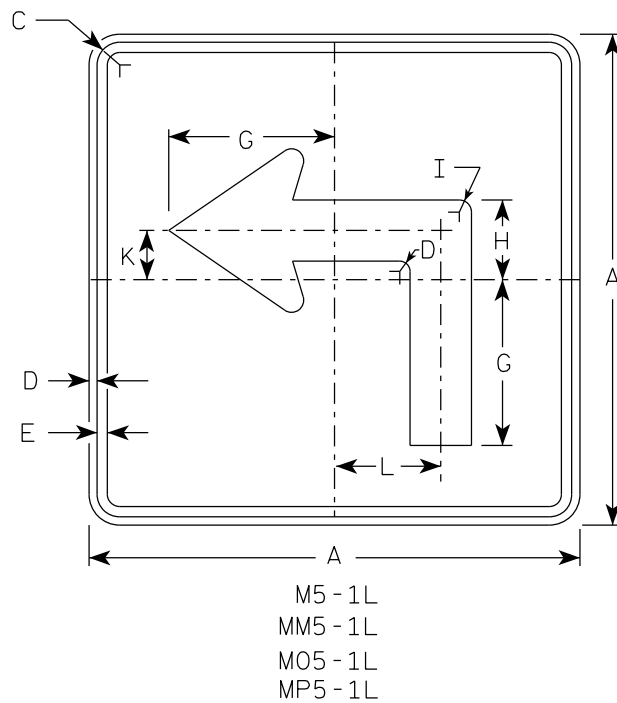
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9R.6

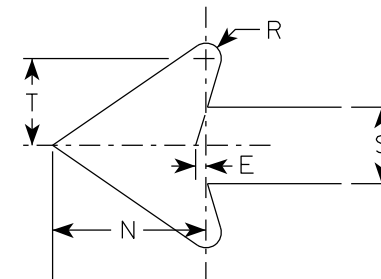
PROJECT NO: HWY: COUNTY: SHEET NO: 95 **E**



NOTES

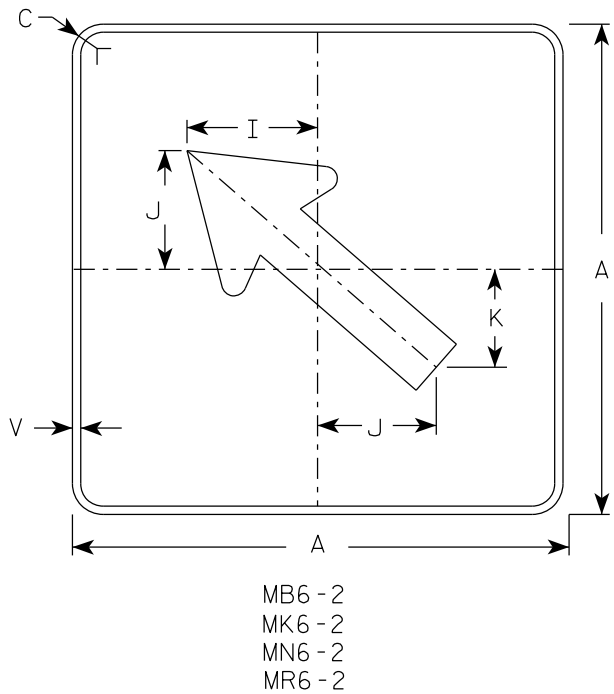
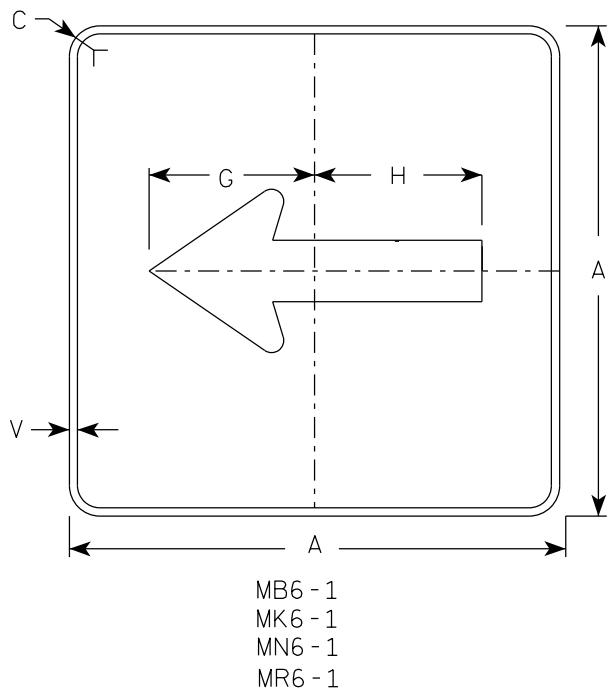
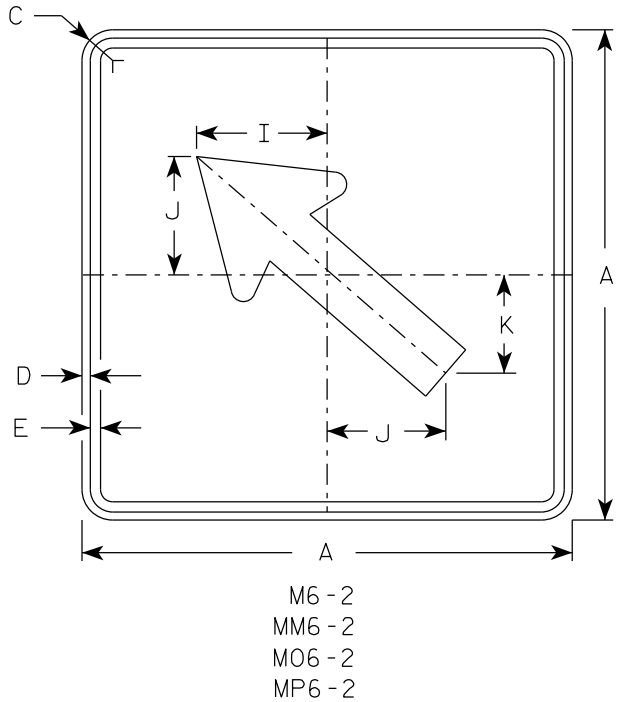
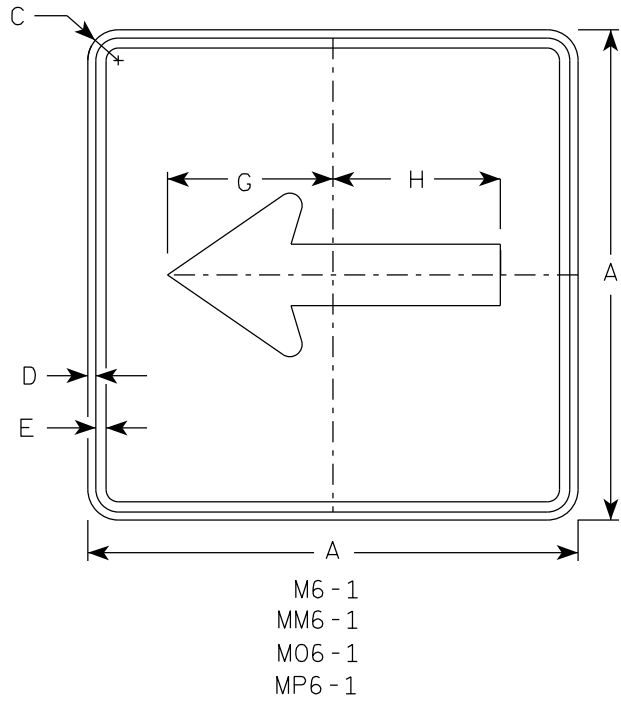
- Signs are Type II - Type H reflective except as shown
- Color:
Background - See note 4
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- | | | |
|-----------|-------|---|
| M5-1 and | M5-2 | Background - White |
| | | Message - Black |
| MB5-1 and | MB5-2 | Background - Blue |
| | | Message - White |
| MK5-1 and | MK5-2 | Background - Green |
| | | Message - White |
| MM5-1 and | MM5-2 | Background - White |
| | | Message - Green |
| MN5-1 and | MN5-2 | Background - Brown |
| | | Message - White |
| M05-1 and | M05-2 | Background - Orange - Type F Reflective |
| | | Message - Black |
| MP5-1 and | MP5-2 | Background - White |
| | | Message - Blue |
| MR5-1 and | MR5-2 | Background - Brown |
| | | Message - Yellow |
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

ARROW DETAIL

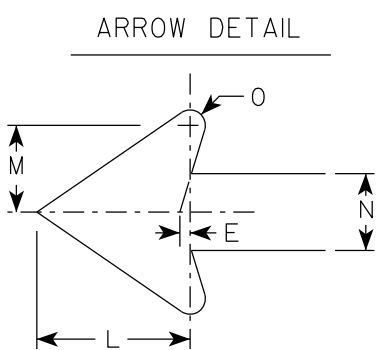


SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
2M	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
3	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
4	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
5	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 96	E
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- NOTES
- Signs are Type II - Type H Reflective except as Shown
 - Color:
Background - See note 4
Message - See note 4
 - Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
 - M6-1 and M6-2 Background - White
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White
MK6-1 and MK6-2 Background - Green
Message - White
MM6-1 and MM6-2 Background - White
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White
M06-1 and M06-2 Background - Orange - Type F Reflective
Message - Black
MP6-1 and MP6-2 Background - White
Message - Blue
MR6-1 and MR6-2 Background - Brown
Message - Yellow



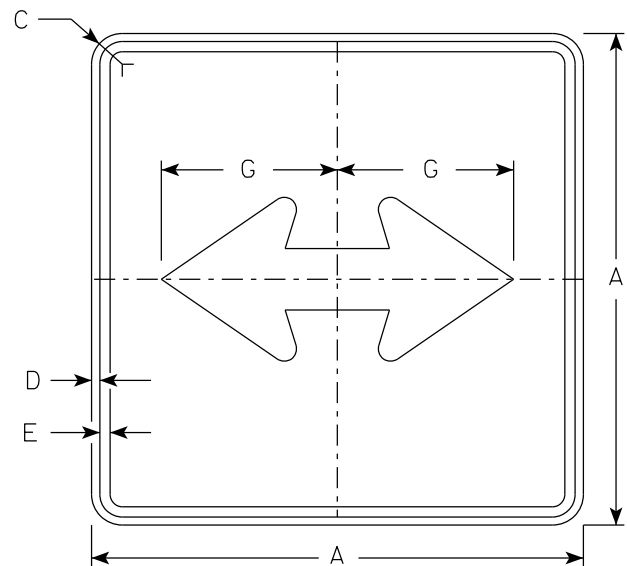
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
2M	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
3	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
4	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
5	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

STANDARD SIGN
M6 - 1 & M6 - 2
SERIES

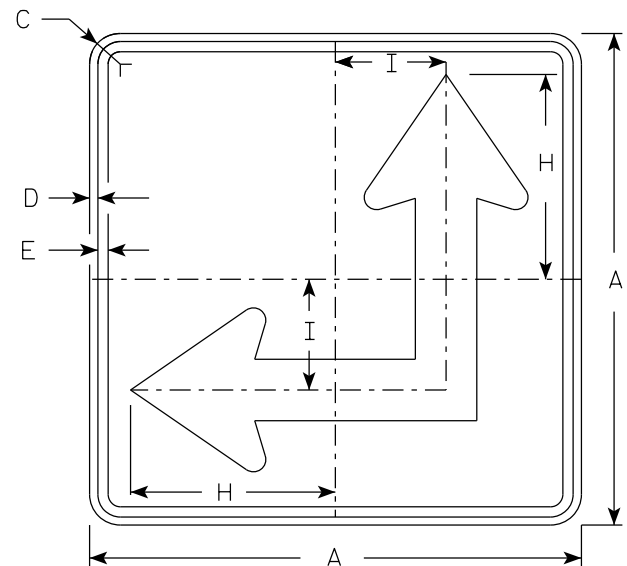
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

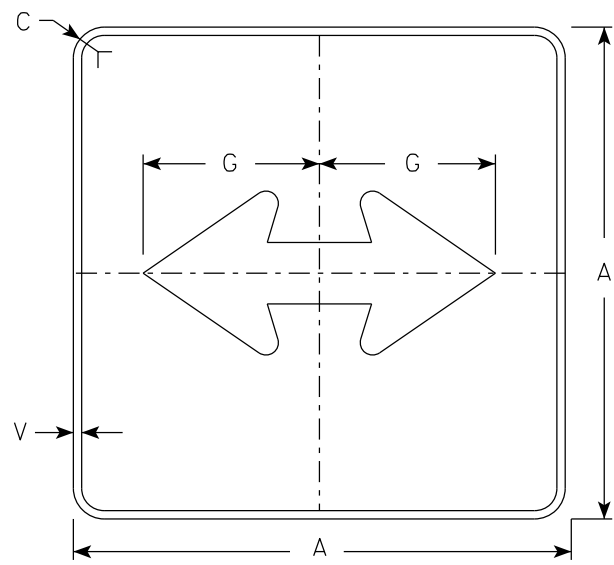
DATE 2/13/2023 PLATE NO. M6-1.16



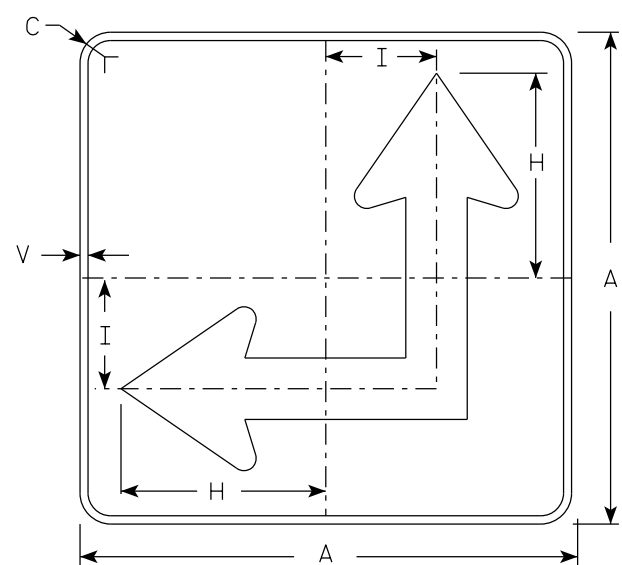
M6 - 4
MM6 - 4
M06 - 4
MP6 - 4



M6 - 6
MM6 - 6
M06 - 6
MP6 - 6



MB6 - 4
MK6 - 4
MN6 - 4
MR6 - 4

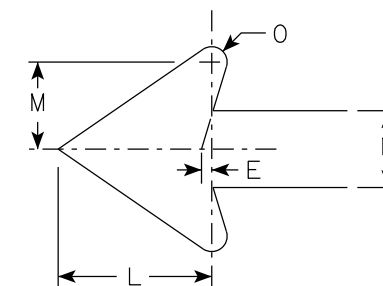


MB6 - 6
MK6 - 6
MN6 - 6
MR6 - 6

NOTES

- Signs are Type II - Type H Reflective except as Shown
- Color:
Background - See Note 4
Message - See Note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M6-4 and M6-6 Background - White
Message - Black
MB6-4 and MB6-6 Background - Blue
Message - White
MK6-4 and MK6-6 Background - Green
Message - White
MM6-4 and MM6-6 Background - White
Message - Green
MN6-4 and MN6-6 Background - Brown
Message - White
M06-4 and M06-6 Background - Orange - Type F Reflective
Message - Black
MP6-4 and MP6-6 Background - White
Message - Blue
MR6-4 and MR6-6 Background - Brown
Message - Yellow
- M6-6R same as M6-6L except arrow points ahead and right.

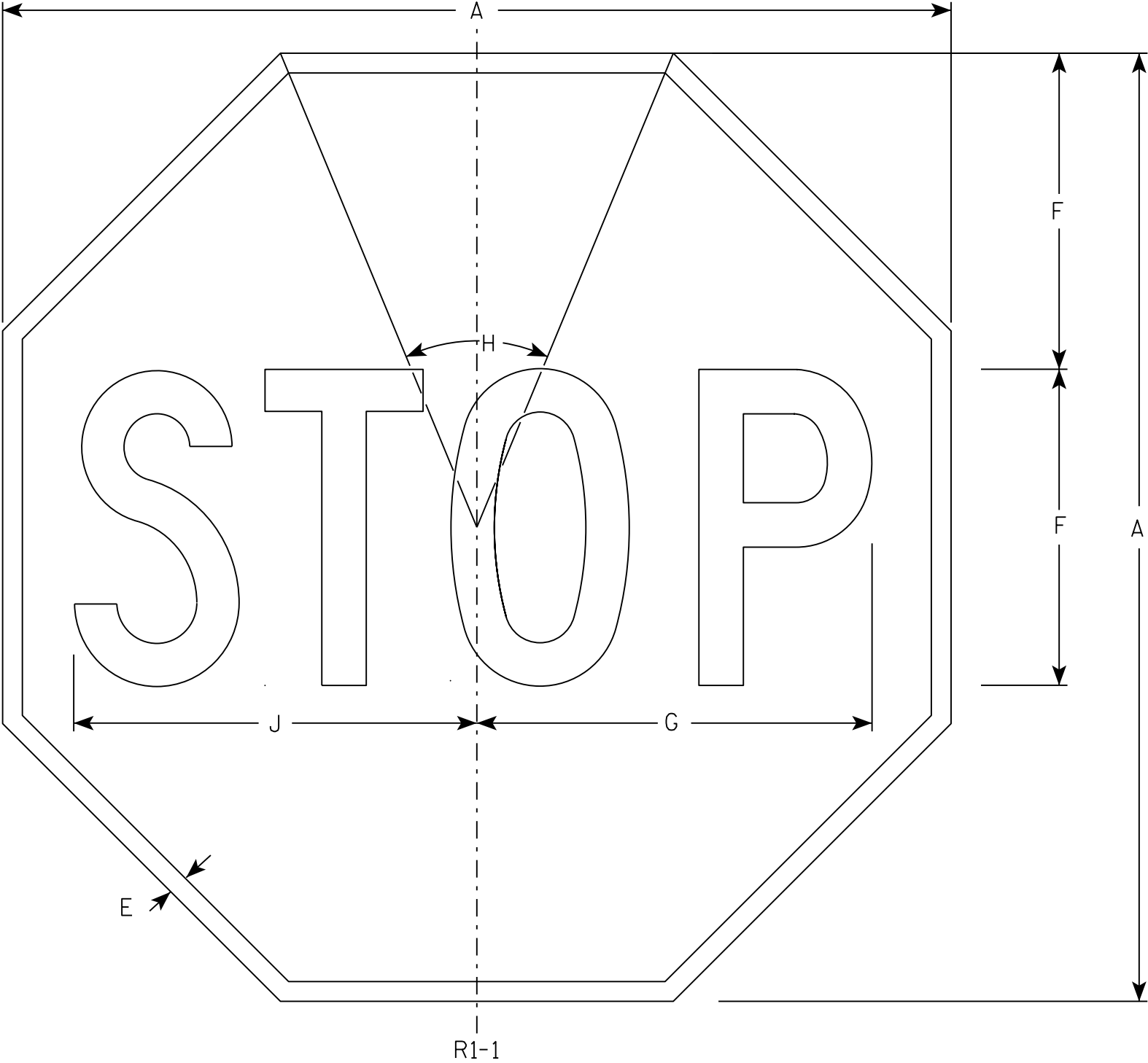
ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2							1/2					3.06
2M	21		1 1/2	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2							1/2					3.06
3	30		1 7/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
4	30		1 7/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
5	30		1 7/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 98												E
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7



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Red
Message - White
- 3. Message Series - C

7

R1-1

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1 - 1

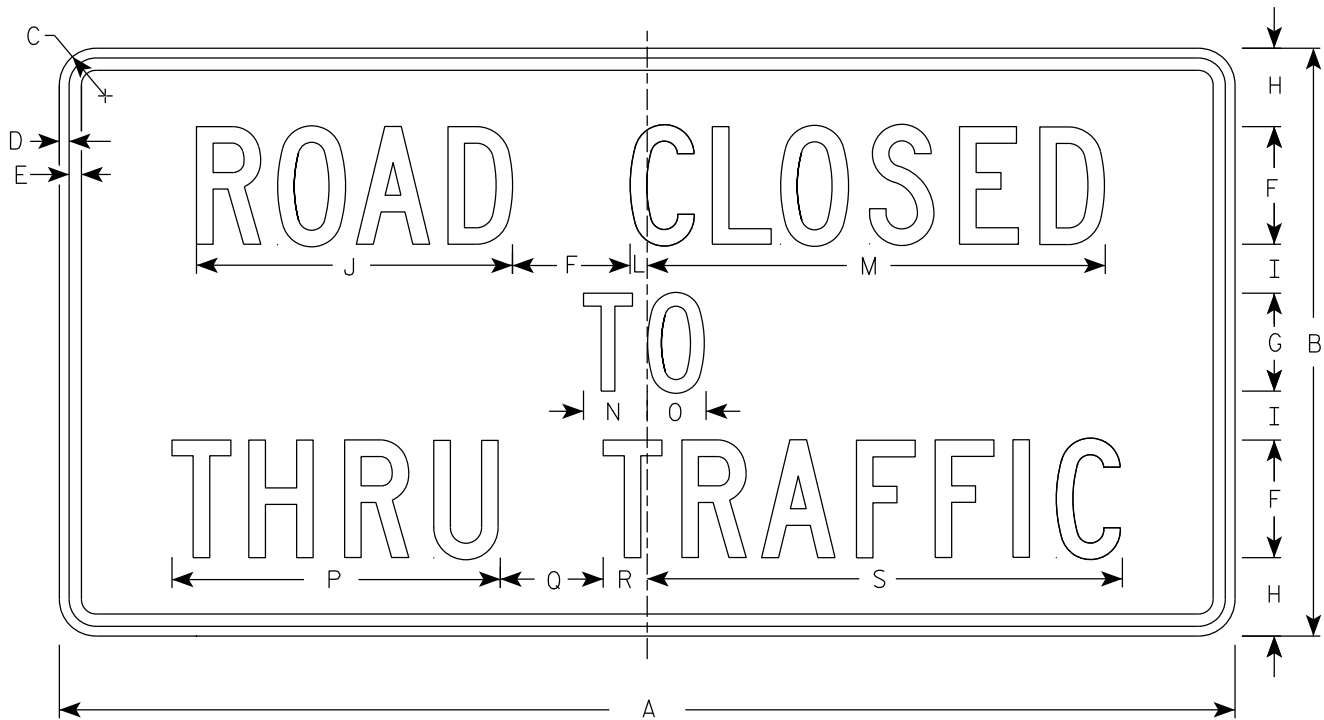
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R11-4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 7⁄8	1⁄2	5⁄8	6	5	4	2 1⁄2	16 1⁄8		7⁄8	23 3⁄8	3 1⁄4	3	16 3⁄4	5 1⁄4	2 1⁄4	24 1⁄4								12.5
2M	60	30	1 7⁄8	1⁄2	5⁄8	6	5	4	2 1⁄2	16 1⁄8		7⁄8	23 3⁄8	3 1⁄4	3	16 3⁄4	5 1⁄4	2 1⁄4	24 1⁄4								12.5
3																											
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 100

E

STANDARD SIGN

R11 - 4

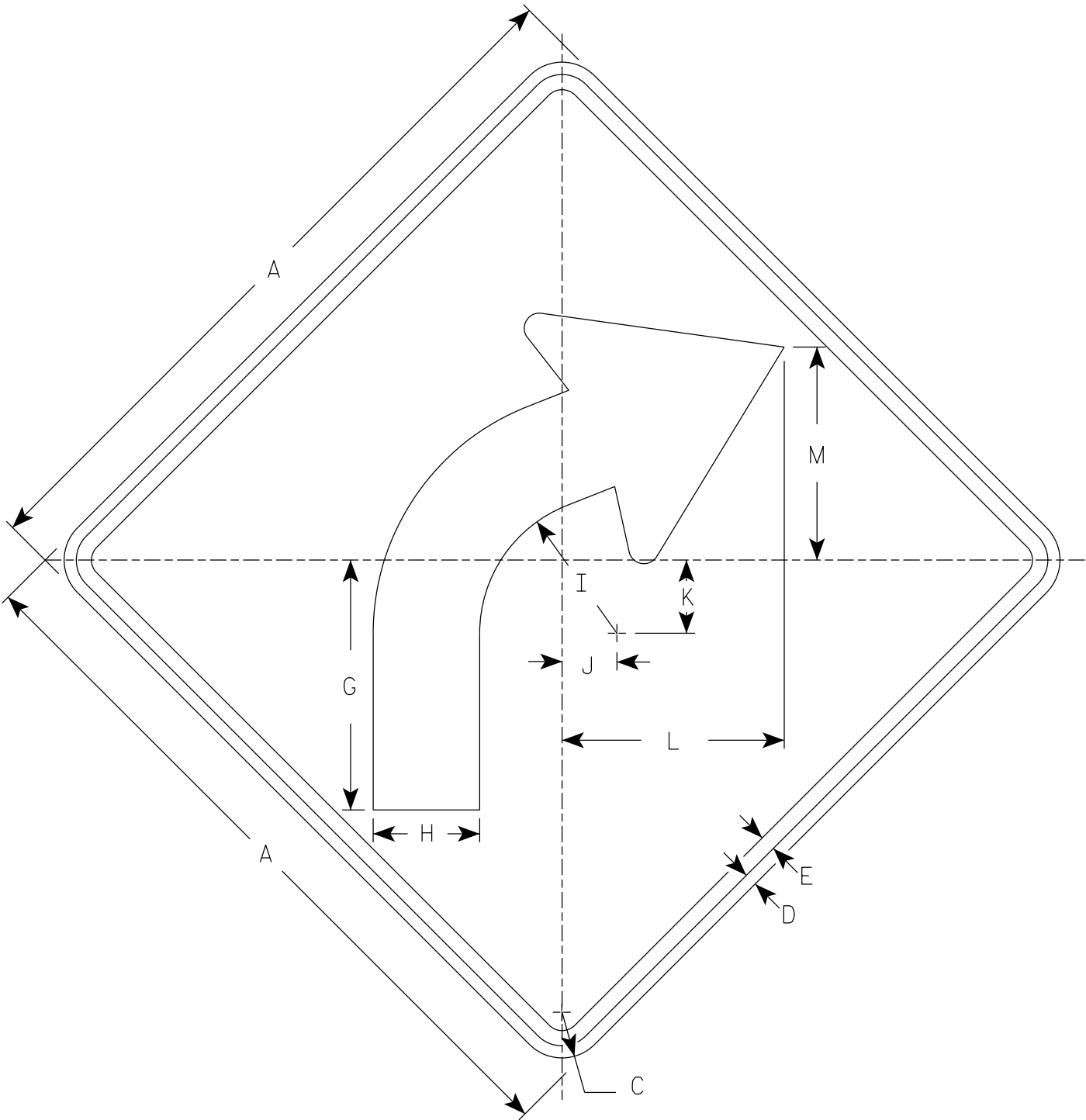
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 2/5/24

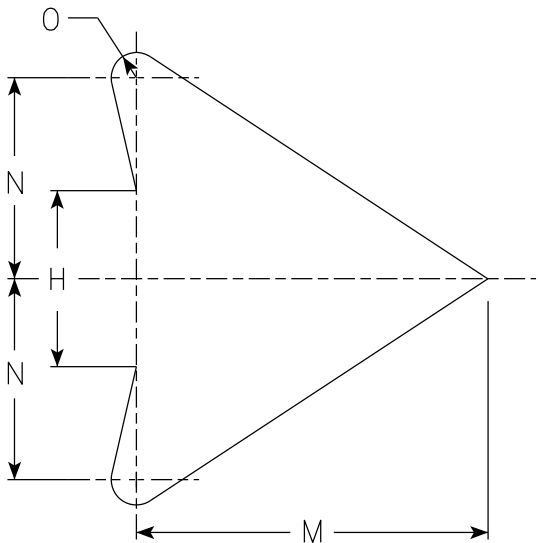
PLATE NO. R11-4.4



W1-2R

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Yellow
Message - Black
- 3. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/2	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 7/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		3	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

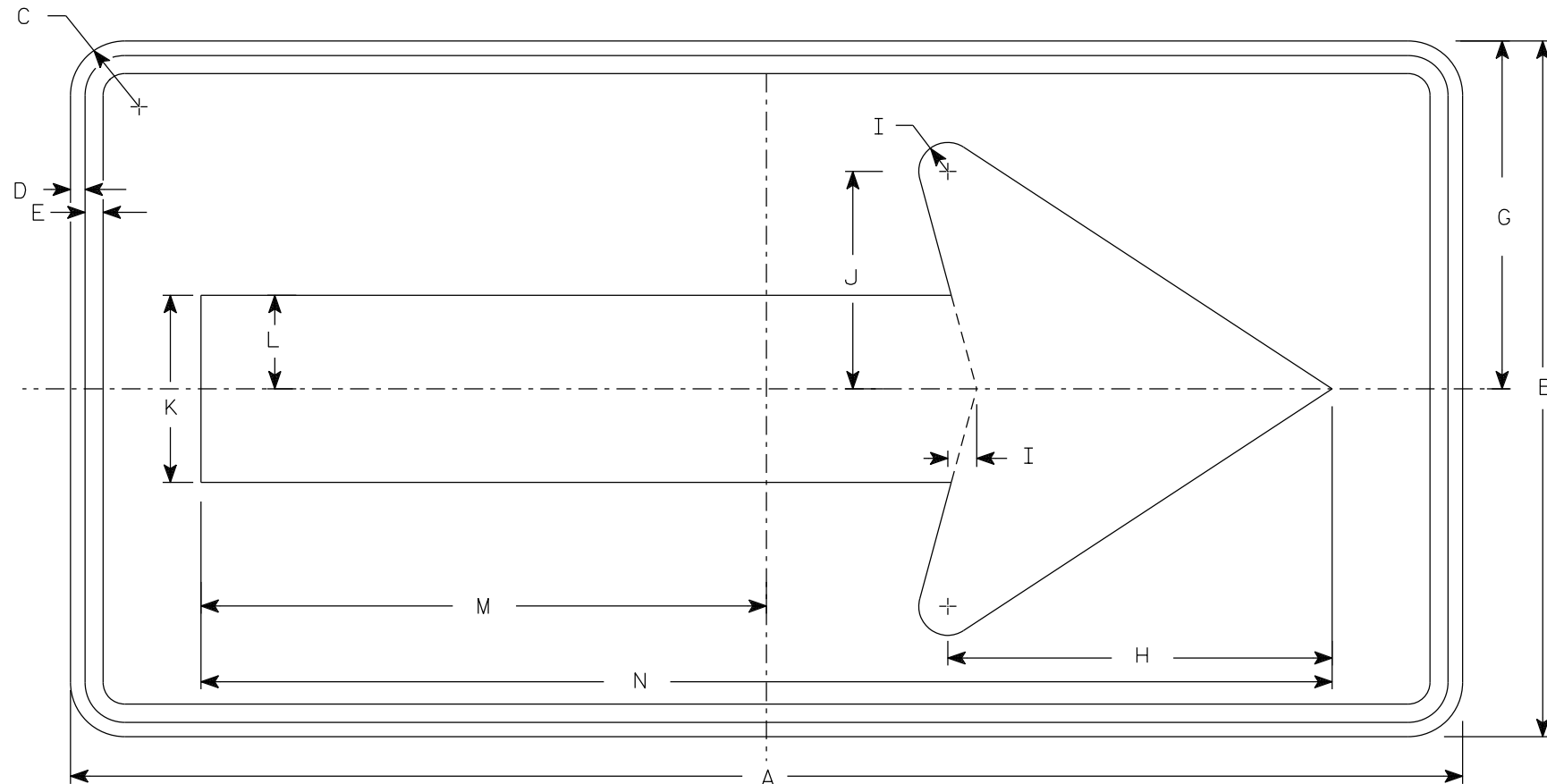
DATE 3/23/2023 PLATE NO. W1-2.11

7

7

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Yellow
 - Message - Black



W1-6

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	3	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

STANDARD SIGN

W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 4/13/2023 PLATE NO. W1-6.9

PROJECT NO:

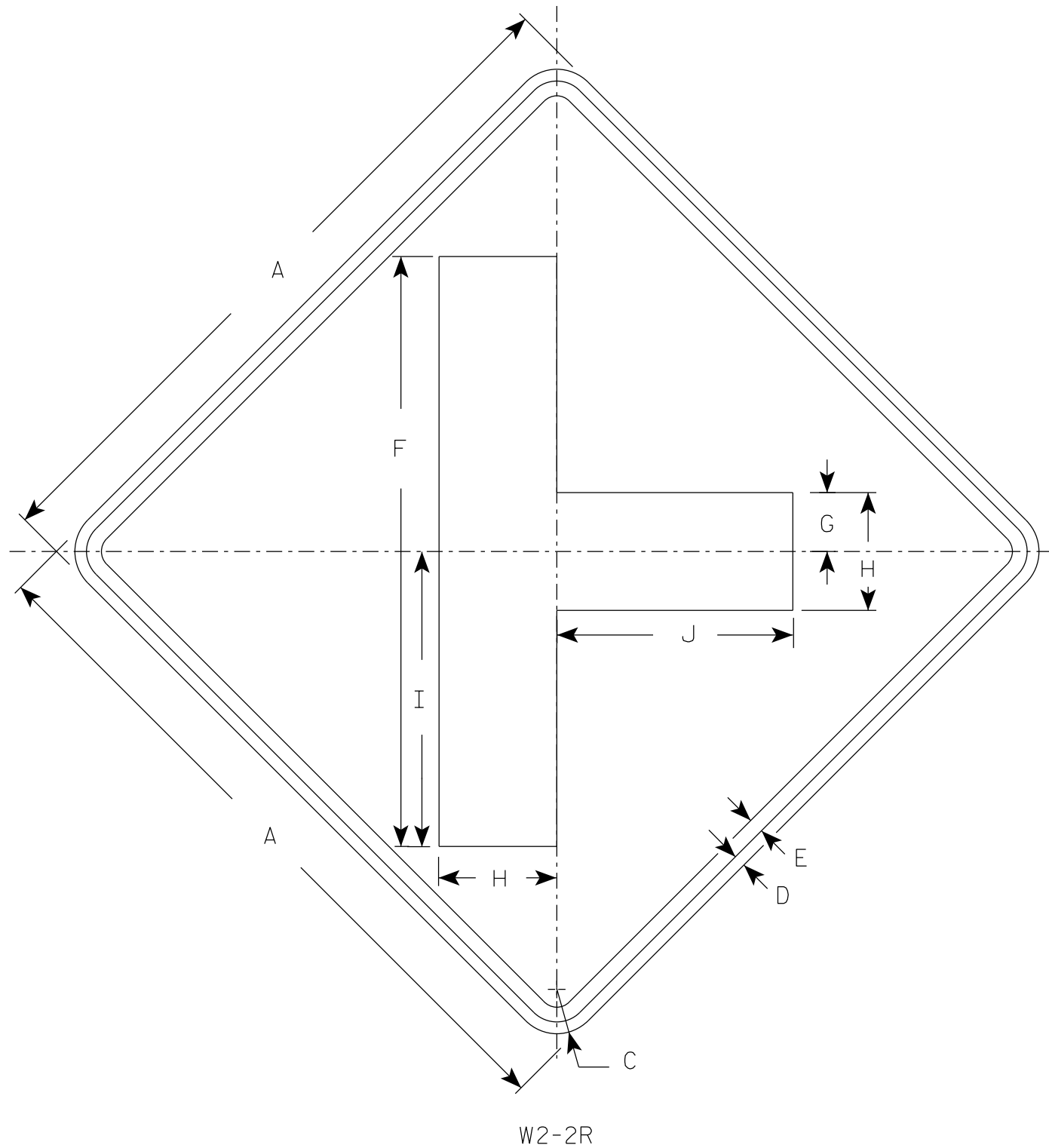
HWY:

COUNTY:

SHEET NO: 102

E

7



NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Yellow
Message - Black
- 3. W2-2L same as W2-2R but is rotated 180° when mounted.

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/2	3/8	1/2	20	2	4	10	8																	4.0
2S	30		1 7/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
2M	30		1 7/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
3	36		2 1/4	5/8	3/4	30	3	6	15	12																	9.0
4	48		3	3/4	1	40	4	8	20	16																	16.0
5																											

PROJECT NO:

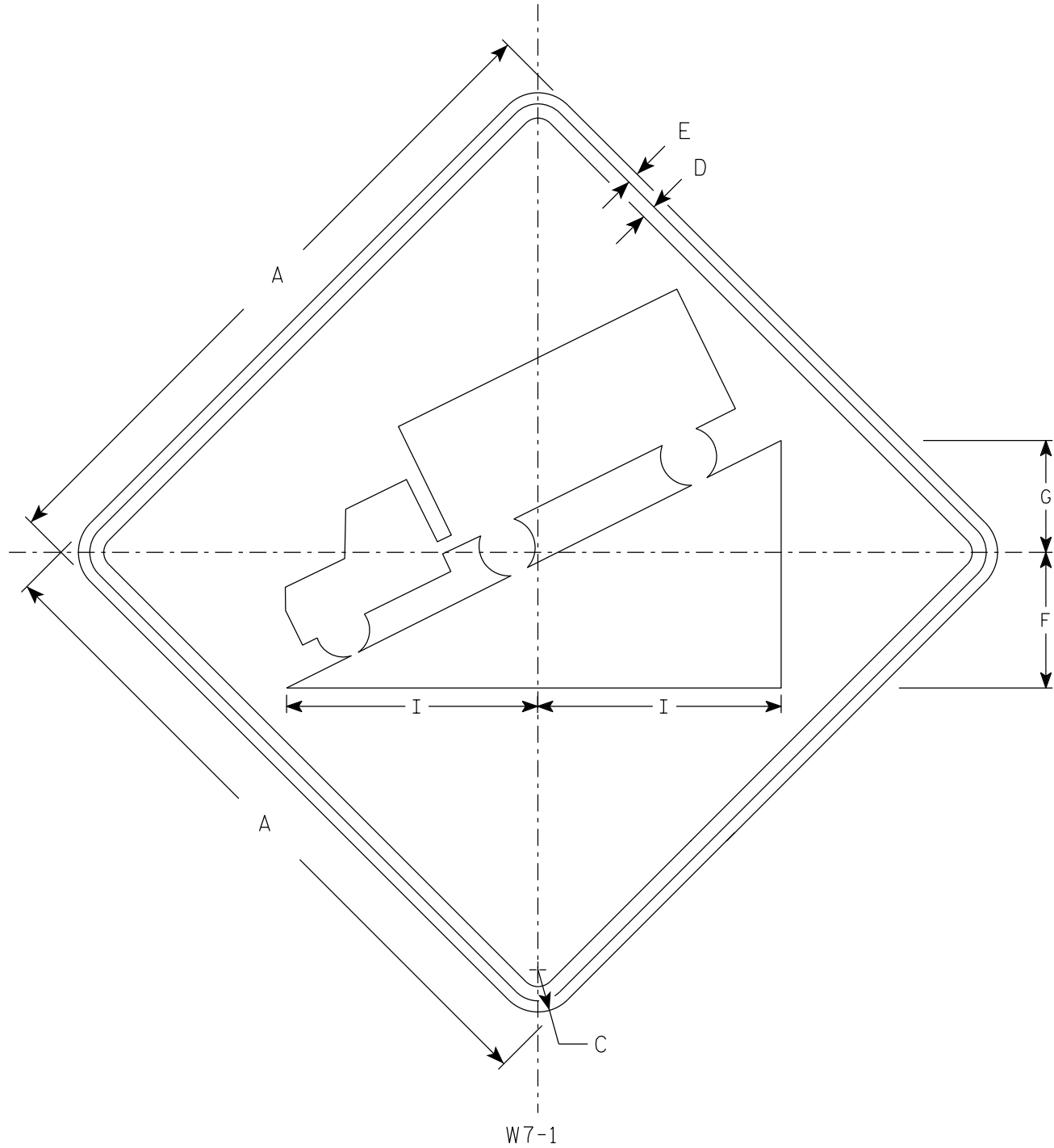
HWY:

COUNTY:

SHEET NO: 103

E

7



NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Yellow
Message - Black
- 3. Message Series - D

7

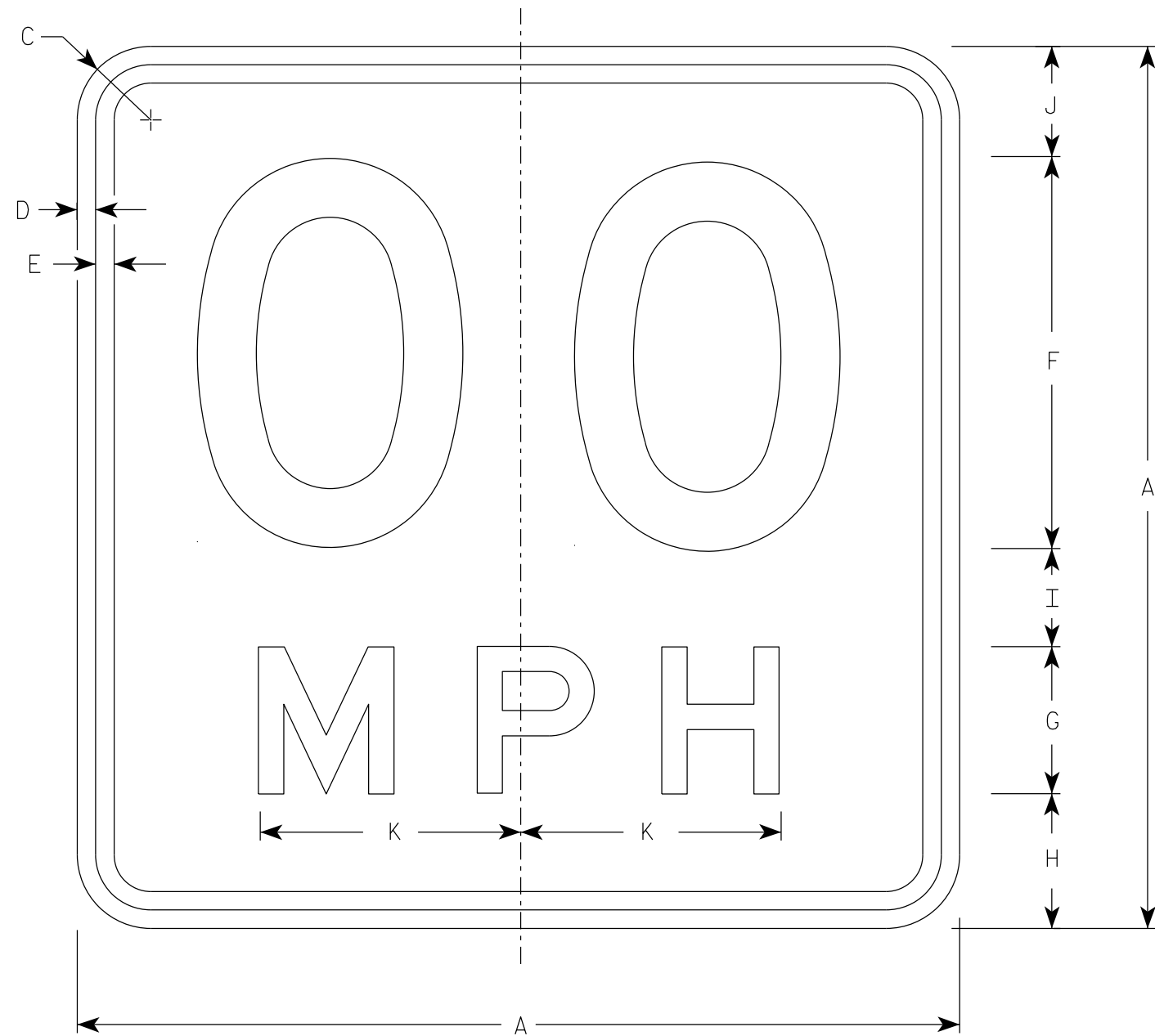
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/2	3/8	3/8	5	4		8 3/4																		4.0
2S	30		1 7/8	1/2	5/8	6	5		11																		6.25
2M	36		2 1/4	5/8	3/4	7 1/4	6		13 1/4																		9.0
3	36		2 1/4	5/8	3/4	7 1/4	6		13 1/4																		9.0
4	36		2 1/4	5/8	3/4	7 1/4	6		13 1/4																		9.0
5	48		3	3/4	1	9 3/4	8		17 1/2																		16.0

STANDARD SIGN
W7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 9/6/2023 PLATE NO. W7-1.14



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
Background - Yellow
Message - Black
3. Message Series - See Note 5
4. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
5. Line 1 is Series D
Line 2 is Series E

W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
✱ 2S	1	18		1 1/2	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8															2.25
	2	18		1 1/2	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8															2.25
✱ 2M	3	18		1 1/2	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8															2.25
	4	24		1 1/2	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8															4.00
	5	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8															9.00
	6	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8															9.00

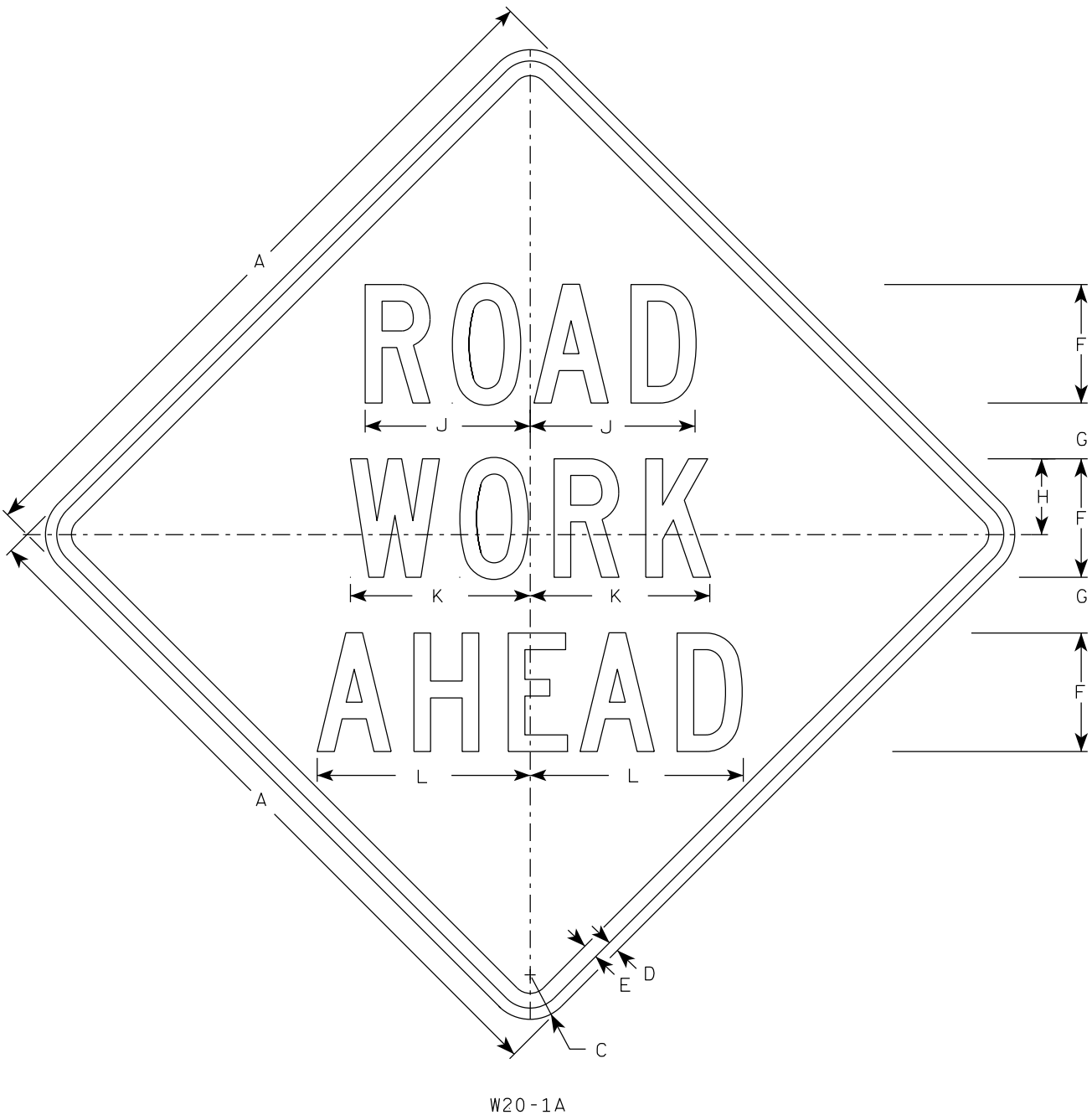
STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

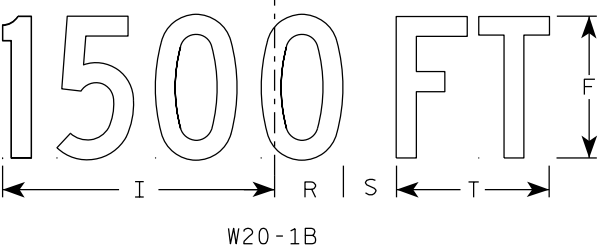
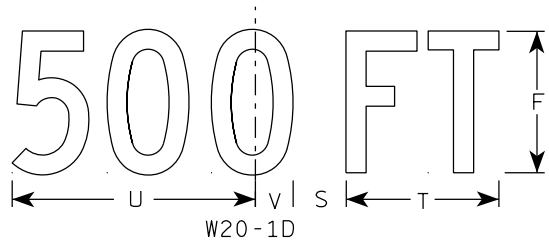
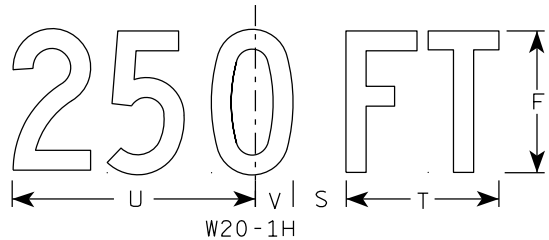
APPROVED Matthew R. Rauch
For State Traffic Engineer

DATE 1/8/2024 PLATE NO. W13-1.17

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: 105 **E**

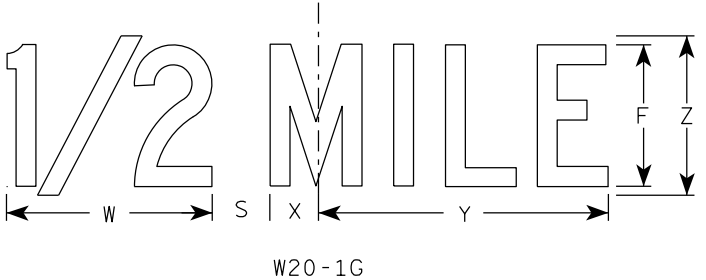


W20-1A

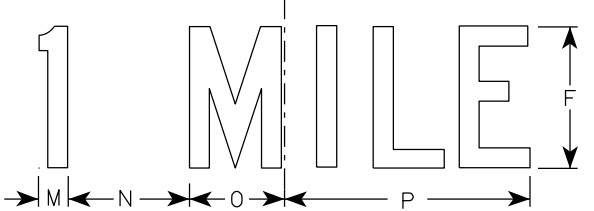


W20-1B

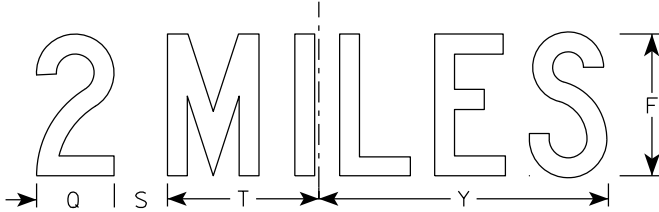
- NOTES
1. Sign is Type II - Type F Reflective
 2. Color:
Background - Orange
Message - Black
 3. Message Series - C
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G

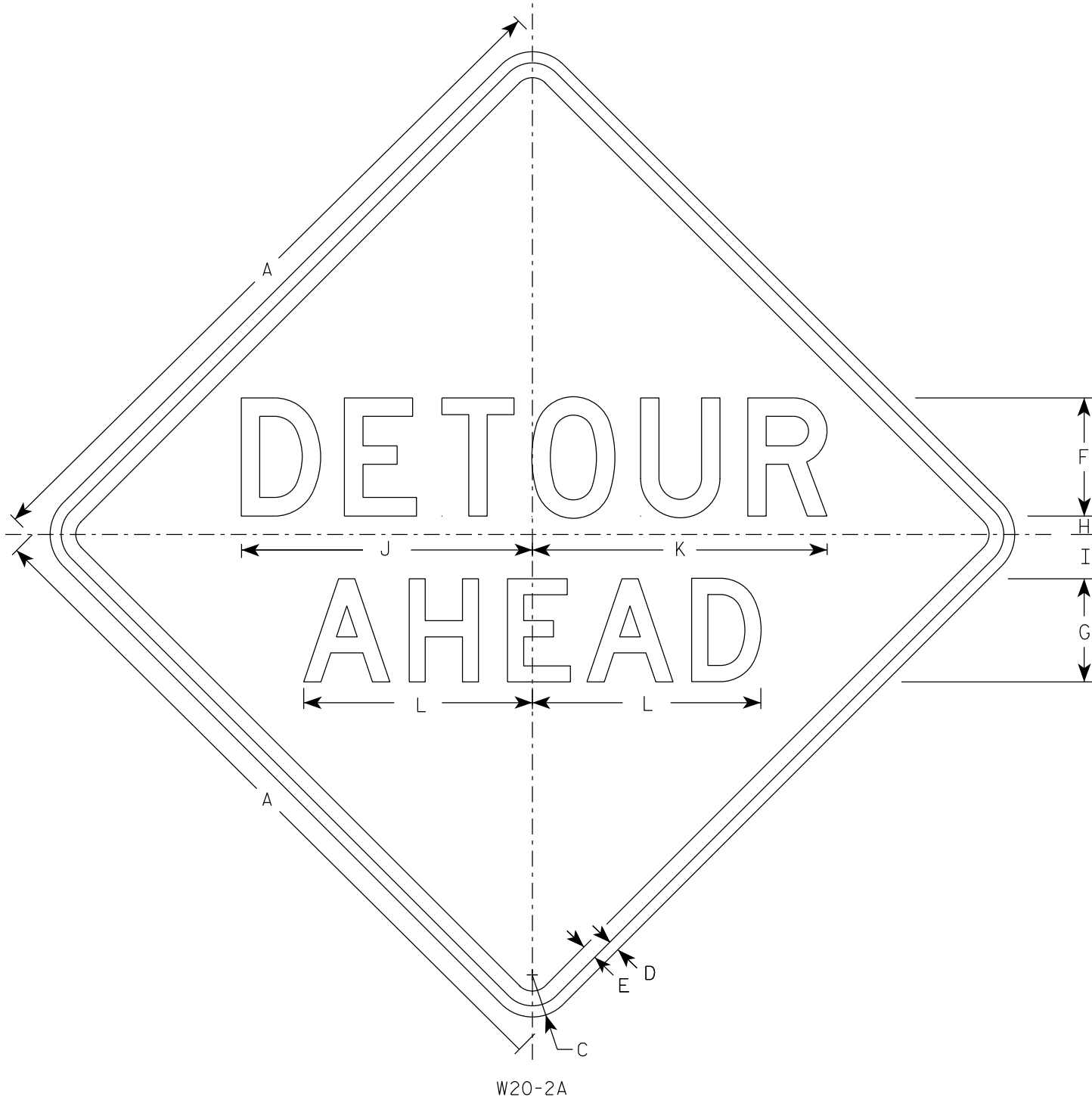


W20-1F

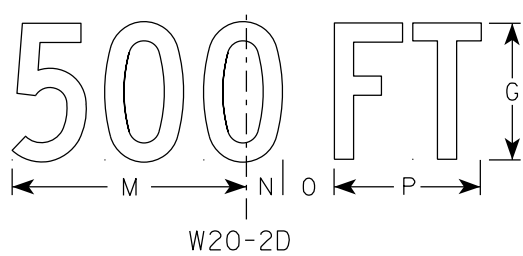


W20-1E

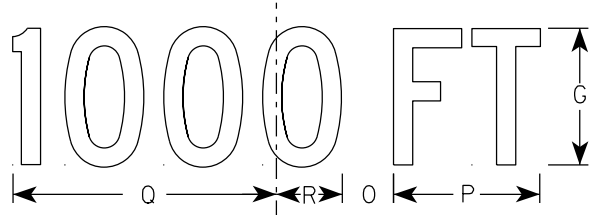
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0



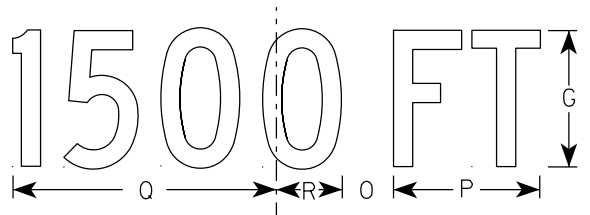
W20-2A



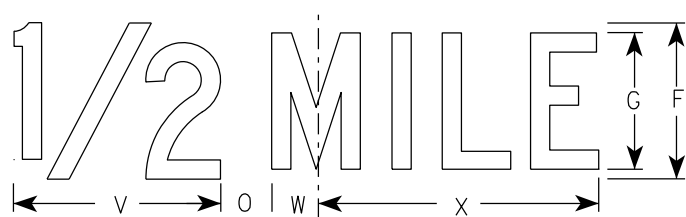
W20-2D



W20-2C



W20-2B



W20-2G



W20-2F

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - See note 5
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Line 1 is Series D.
Line 2 is Series D for AHEAD and Series C for all other distances.

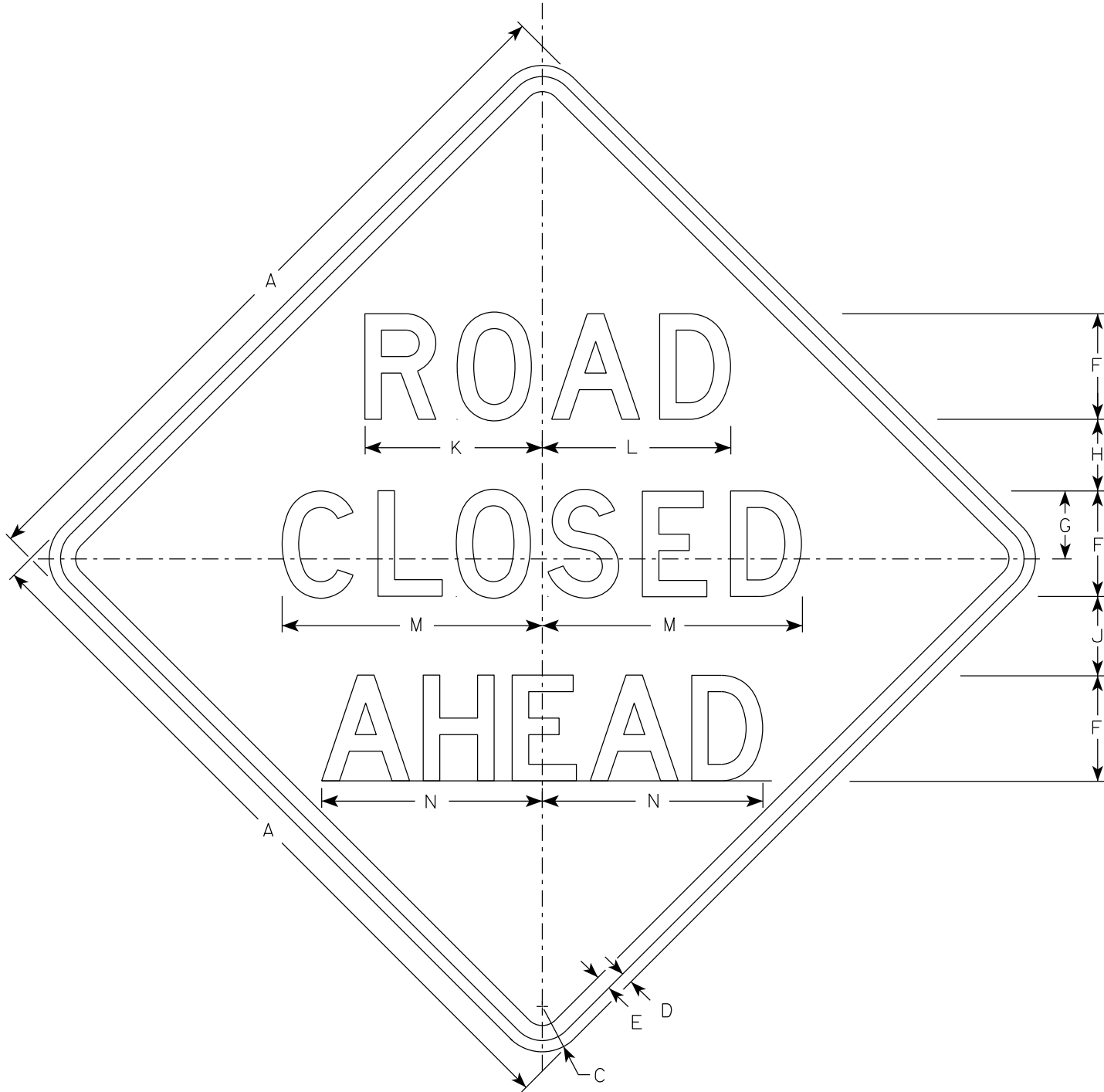
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	w	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

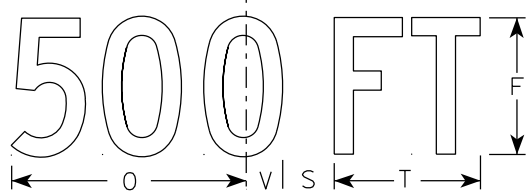
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

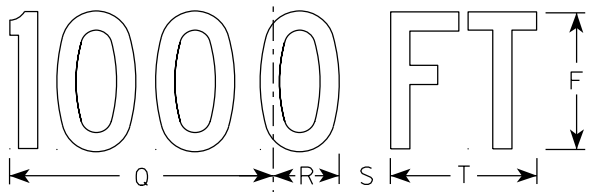
DATE 1/10/2024 PLATE NO. W20-2.7



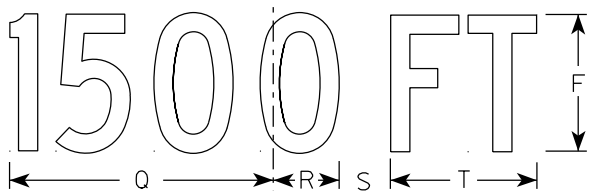
W20-3A



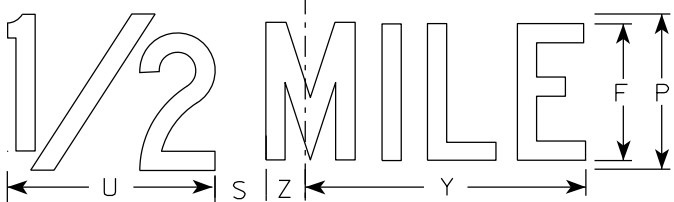
W20-3D



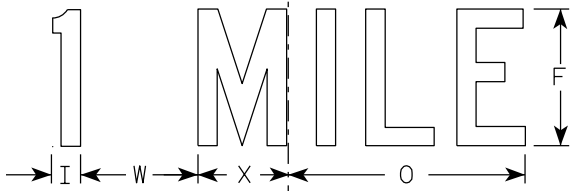
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Message Series - see note 5
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Lines 1 and 2 are Series D.
Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-3.8

DIVISION 1 - CTH D

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT	EXPANDED FILL	EXPANDED ROCK	MASS ORDNATE
							1.00	1.30	1.10	
105+75	2.87	2.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
106+00	1.29	11.15	0.00	2.00	6.00	0.00	2.00	7.80	0.00	-5.80
106+50	0.89	12.63	0.00	2.00	22.00	0.00	4.00	36.40	0.00	-32.40
107+00	1.39	23.46	0.00	2.00	33.00	0.00	6.00	79.30	0.00	-73.30
107+50	0.63	35.37	0.00	2.00	54.00	0.00	8.00	149.50	0.00	-141.50
108+00	0.42	56.98	0.00	1.00	86.00	0.00	9.00	261.30	0.00	-252.30
108+50	2.16	62.06	0.00	2.00	110.00	0.00	11.00	404.30	0.00	-393.30
109+00	2.20	56.81	0.00	4.00	110.00	0.00	15.00	547.30	0.00	-532.30
109+50	0.16	81.37	0.00	2.00	128.00	0.00	17.00	713.70	0.00	-696.70
110+00	0.21	91.39	0.00	0.00	160.00	0.00	17.00	921.70	0.00	-904.70
110+50	0.22	79.61	0.00	0.00	158.00	0.00	17.00	1127.10	0.00	-1110.10
110+71	0.45	180.34	0.00	0.00	101.00	0.00	17.00	1258.40	0.00	-1241.40
111+00	0.79	45.67	0.00	1.00	121.00	0.00	18.00	1415.70	0.00	-1397.70
111+50	0.84	38.97	0.00	2.00	78.00	0.00	20.00	1517.10	0.00	-1497.10
111+88	1.16	54.17	0.00	1.00	66.00	0.00	21.00	1602.90	0.00	-1581.90
112+00	1.44	22.17	0.00	1.00	17.00	0.00	22.00	1625.00	0.00	-1603.00
112+50	1.11	22.27	0.00	2.00	41.00	0.00	24.00	1678.30	0.00	-1654.30
113+00	0.05	20.45	0.00	1.00	40.00	0.00	25.00	1730.30	0.00	-1705.30
113+50	0.26	24.09	0.00	0.00	41.00	0.00	25.00	1783.60	0.00	-1758.60
114+00	0.07	40.19	0.00	0.00	60.00	0.00	25.00	1861.60	0.00	-1836.60
114+50	0.01	63.62	0.00	0.00	96.00	0.00	25.00	1986.40	0.00	-1961.40
114+78	0.05	68.59	0.00	0.00	69.00	0.00	25.00	2076.10	0.00	-2051.10
115+00	0.14	55.10	0.00	0.00	50.00	0.00	25.00	2141.10	0.00	-2116.10
115+50	0.07	37.46	0.00	0.00	86.00	0.00	25.00	2252.90	0.00	-2227.90
116+00	0.09	28.85	0.00	0.00	61.00	0.00	25.00	2332.20	0.00	-2307.20
116+50	1.19	18.18	0.00	1.00	44.00	0.00	26.00	2389.40	0.00	-2363.40
117+00	3.60	9.01	0.00	4.00	25.00	0.00	30.00	2421.90	0.00	-2391.90
117+50	2.84	9.58	0.00	6.00	17.00	0.00	36.00	2444.00	0.00	-2408.00
118+00	3.15	8.87	0.00	6.00	17.00	0.00	42.00	2466.10	0.00	-2424.10
118+50	2.53	15.54	0.00	5.00	23.00	0.00	47.00	2496.00	0.00	-2449.00
119+00	1.27	23.87	0.00	4.00	36.00	0.00	51.00	2542.80	0.00	-2491.80
119+50	1.82	19.74	0.00	3.00	40.00	0.00	54.00	2594.80	0.00	-2540.80
120+00	1.16	20.58	0.00	3.00	37.00	0.00	57.00	2642.90	0.00	-2585.90
120+50	1.17	24.88	0.00	2.00	42.00	0.00	59.00	2697.50	0.00	-2638.50
121+00	0.92	17.66	0.00	2.00	39.00	0.00	61.00	2748.20	0.00	-2687.20
121+50	0.71	17.65	0.00	2.00	33.00	0.00	63.00	2791.10	0.00	-2728.10
122+00	1.09	20.96	0.00	2.00	36.00	0.00	65.00	2837.90	0.00	-2772.90
122+50	1.73	23.41	0.00	3.00	41.00	0.00	68.00	2891.20	0.00	-2823.20
122+55	1.90	27.58	0.00	0.00	5.00	0.00	68.00	2897.70	0.00	-2829.70
123+00	1.67	18.97	0.00	3.00	39.00	0.00	71.00	2948.40	0.00	-2877.40
123+50	0.84	18.84	0.00	2.00	35.00	0.00	73.00	2993.90	0.00	-2920.90
124+00	1.31	18.20	0.00	2.00	34.00	0.00	75.00	3038.10	0.00	-2963.10
124+50	1.80	19.99	0.00	3.00	35.00	0.00	78.00	3083.60	0.00	-3005.60
125+00	1.29	23.38	0.00	3.00	40.00	0.00	81.00	3135.60	0.00	-3054.60
125+50	0.76	20.17	0.00	2.00	40.00	0.00	83.00	3187.60	0.00	-3104.60
125+64	0.91	17.90	0.00	0.00	10.00	0.00	83.00	3200.60	0.00	-3117.60
126+00	1.24	16.67	0.00	1.00	23.00	0.00	84.00	3230.50	0.00	-3146.50
126+50	1.53	15.79	0.00	3.00	30.00	0.00	87.00	3269.50	0.00	-3182.50
127+00	2.10	9.25	0.00	3.00	23.00	0.00	90.00	3299.40	0.00	-3209.40
127+21	1.81	23.82	0.00	2.00	13.00	0.00	92.00	3316.30	0.00	-3224.30
127+50	1.62	11.75	0.00	2.00	19.00	0.00	94.00	3341.00	0.00	-3247.00
128+00	0.96	11.13	0.00	2.00	21.00	0.00	96.00	3368.30	0.00	-3272.30
128+44	1.17	14.50	0.00	2.00	21.00	0.00	98.00	3395.60	0.00	-3297.60
128+50	1.31	13.94	0.00	0.00	3.00	0.00	98.00	3399.50	0.00	-3301.50

DIVISION 1 - CTH D

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT	EXPANDED	EXPANDED	MASS ORDNATE
							FILL	ROCK		
	1.00	1.30	1.10							
129+00	1.15	21.67	0.00	2.00	33.00	0.00	100.00	3442.40	0.00	-3342.40
129+50	0.77	33.33	0.00	2.00	51.00	0.00	102.00	3508.70	0.00	-3406.70
130+00	1.14	33.23	0.00	2.00	62.00	0.00	104.00	3589.30	0.00	-3485.30
130+50	0.98	22.09	0.00	2.00	51.00	0.00	106.00	3655.60	0.00	-3549.60
131+00	1.53	23.61	0.00	2.00	42.00	0.00	108.00	3710.20	0.00	-3602.20
131+50	2.94	23.07	0.00	4.00	43.00	0.00	112.00	3766.10	0.00	-3654.10
132+00	2.30	27.07	0.00	5.00	46.00	0.00	117.00	3825.90	0.00	-3708.90
132+50	2.67	32.17	0.00	5.00	55.00	0.00	122.00	3897.40	0.00	-3775.40
133+00	3.27	40.59	0.00	5.00	67.00	0.00	127.00	3984.50	0.00	-3857.50
133+50	3.51	40.25	0.00	6.00	75.00	0.00	133.00	4082.00	0.00	-3949.00
134+00	1.46	28.34	0.00	5.00	64.00	0.00	138.00	4165.20	0.00	-4027.20
134+50	0.18	41.13	0.00	2.00	64.00	0.00	140.00	4248.40	0.00	-4108.40
135+00	0.23	24.97	0.00	0.00	61.00	0.00	140.00	4327.70	0.00	-4187.70
135+50	0.48	26.64	0.00	1.00	48.00	0.00	141.00	4390.10	0.00	-4249.10
136+00	1.70	29.31	0.00	2.00	52.00	0.00	143.00	4457.70	0.00	-4314.70
136+50	2.63	26.81	0.00	4.00	52.00	0.00	147.00	4525.30	0.00	-4378.30
137+00	2.67	35.07	0.00	5.00	57.00	0.00	152.00	4599.40	0.00	-4447.40
137+50	0.73	11.93	0.00	3.00	44.00	0.00	155.00	4656.60	0.00	-4501.60
137+65	1.05	22.88	0.00	0.00	10.00	0.00	155.00	4669.60	0.00	-4514.60
138+00	0.05	22.53	0.00	1.00	29.00	0.00	156.00	4707.30	0.00	-4551.30
138+50	0.13	20.42	0.00	0.00	40.00	0.00	156.00	4759.30	0.00	-4603.30
139+00	0.29	18.87	0.00	0.00	36.00	0.00	156.00	4806.10	0.00	-4650.10
139+50	0.13	24.21	0.00	0.00	40.00	0.00	156.00	4858.10	0.00	-4702.10
140+00	0.15	31.03	0.00	0.00	51.00	0.00	156.00	4924.40	0.00	-4768.40
140+50	0.16	33.53	0.00	0.00	60.00	0.00	156.00	5002.40	0.00	-4846.40
141+00	0.15	38.88	0.00	0.00	67.00	0.00	156.00	5089.50	0.00	-4933.50
141+50	0.16	62.02	0.00	0.00	93.00	0.00	156.00	5210.40	0.00	-5054.40
142+00	0.16	63.30	0.00	0.00	116.00	0.00	156.00	5361.20	0.00	-5205.20
142+50	0.15	40.80	0.00	0.00	96.00	0.00	156.00	5486.00	0.00	-5330.00
143+00	0.08	36.62	0.00	0.00	72.00	0.00	156.00	5579.60	0.00	-5423.60
143+50	15.61	25.75	0.00	15.00	58.00	0.00	171.00	5655.00	0.00	-5484.00
144+00	153.00	15.27	0.00	156.00	38.00	0.00	327.00	5704.40	0.00	-5377.40
144+50	272.09	11.87	0.00	394.00	25.00	0.00	721.00	5736.90	0.00	-5015.90
145+00	310.94	11.59	0.00	540.00	22.00	0.00	1261.00	5765.50	0.00	-4504.50
145+50	243.20	9.93	0.00	513.00	20.00	0.00	1774.00	5791.50	0.00	-4017.50
146+00	70.96	8.43	0.00	291.00	17.00	0.00	2065.00	5813.60	0.00	-3748.60
146+50	22.23	17.64	0.00	86.00	24.00	0.00	2151.00	5844.80	0.00	-3693.80
147+00	14.09	23.48	0.00	34.00	38.00	0.00	2185.00	5894.20	0.00	-3709.20
147+60	8.73	15.21	0.00	25.00	43.00	0.00	2210.00	5950.10	0.00	-3740.10
148+00	9.73	38.44	0.00	14.00	40.00	0.00	2224.00	6002.10	0.00	-3778.10
148+50	0.54	154.46	0.00	10.00	179.00	0.00	2234.00	6234.80	0.00	-4000.80
148+92	2.06	46.03	0.00	2.00	156.00	0.00	2236.00	6437.60	0.00	-4201.60
149+00	2.51	19.64	0.00	1.00	10.00	0.00	2237.00	6450.60	0.00	-4213.60
149+26	4.27	46.77	0.00	3.00	32.00	0.00	2240.00	6492.20	0.00	-4252.20
149+50	6.11	16.76	0.00	5.00	28.00	0.00	2245.00	6528.60	0.00	-4283.60
150+00	5.62	21.69	0.00	11.00	36.00	0.00	2256.00	6575.40	0.00	-4319.40
150+50	5.22	21.18	0.00	10.00	40.00	0.00	2266.00	6627.40	0.00	-4361.40
151+00	6.29	2.73	0.00	11.00	22.00	0.00	2277.00	6656.00	0.00	-4379.00
151+50	4.70	2.99	0.00	10.00	5.00	0.00	2287.00	6662.50	0.00	-4375.50
152+00	2.69	13.50	0.00	7.00	15.00	0.00	2294.00	6682.00	0.00	-4388.00
152+50	2.12	19.61	0.00	4.00	31.00	0.00	2298.00	6722.30	0.00	-4424.30
153+00	2.30	7.93	0.00	4.00	26.00	0.00	2302.00	6756.10	0.00	-4454.10
153+25	2.53	14.10	0.00	2.00	10.00	0.00	2304.00	6769.10	0.00	-4465.10
153+50	3.51	3.86	0.00	3.00	8.00	0.00	2307.00	6779.50	0.00	-4472.50

DIVISION 1 - CTH D

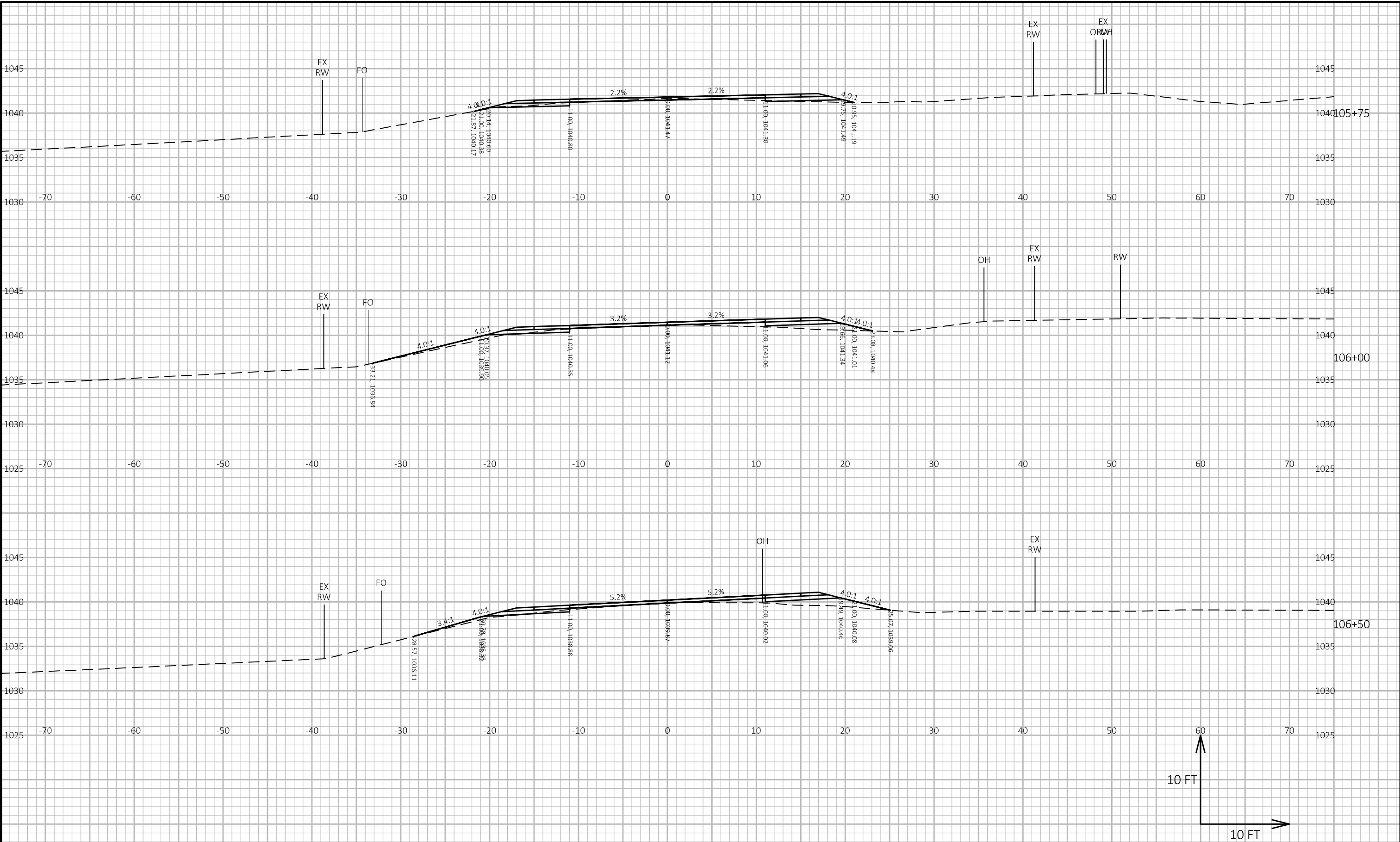
STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT	EXPANDED	EXPANDED	MASS ORDNATE
							1.00	FILL 1.30	ROCK 1.10	
154+00	3.09	14.87	0.00	6.00	17.00	0.00	2313.00	6801.60	0.00	-4488.60
154+50	4.23	10.96	0.00	7.00	24.00	0.00	2320.00	6832.80	0.00	-4512.80
155+00	3.70	10.52	0.00	7.00	20.00	0.00	2327.00	6858.80	0.00	-4531.80
155+50	3.59	6.70	0.00	7.00	16.00	0.00	2334.00	6879.60	0.00	-4545.60
156+00	4.50	3.88	0.00	7.00	10.00	0.00	2341.00	6892.60	0.00	-4551.60
156+50	3.36	23.25	0.00	7.00	25.00	0.00	2348.00	6925.10	0.00	-4577.10
157+00	2.72	8.42	0.00	6.00	29.00	0.00	2354.00	6962.80	0.00	-4608.80
157+50	2.23	9.56	0.00	5.00	17.00	0.00	2359.00	6984.90	0.00	-4625.90
158+00	2.07	11.97	0.00	4.00	20.00	0.00	2363.00	7010.90	0.00	-4647.90
158+50	1.94	13.45	0.00	4.00	24.00	0.00	2367.00	7042.10	0.00	-4675.10
159+00	1.92	10.88	0.00	4.00	23.00	0.00	2371.00	7072.00	0.00	-4701.00
159+50	2.79	10.52	0.00	4.00	20.00	0.00	2375.00	7098.00	0.00	-4723.00
160+00	3.30	11.15	0.00	6.00	20.00	0.00	2381.00	7124.00	0.00	-4743.00
160+50	3.19	11.74	0.00	6.00	21.00	0.00	2387.00	7151.30	0.00	-4764.30
161+00	2.48	12.79	0.00	5.00	23.00	0.00	2392.00	7181.20	0.00	-4789.20
161+50	1.68	13.12	0.00	4.00	24.00	0.00	2396.00	7212.40	0.00	-4816.40
162+00	1.23	12.14	0.00	3.00	23.00	0.00	2399.00	7242.30	0.00	-4843.30
162+50	1.49	8.87	0.00	3.00	19.00	0.00	2402.00	7267.00	0.00	-4865.00
163+00	2.15	6.93	0.00	3.00	15.00	0.00	2405.00	7286.50	0.00	-4881.50
163+50	2.27	6.90	0.00	4.00	13.00	0.00	2409.00	7303.40	0.00	-4894.40
164+00	0.23	14.76	0.00	2.00	20.00	0.00	2411.00	7329.40	0.00	-4918.40
164+50	0.00	24.66	0.00	0.00	36.00	0.00	2411.00	7376.20	0.00	-4965.20
165+00	0.54	28.38	0.00	1.00	49.00	0.00	2412.00	7439.90	0.00	-5027.90
165+50	2.47	34.57	0.00	3.00	58.00	0.00	2415.00	7515.30	0.00	-5100.30
166+00	0.15	38.78	0.00	2.00	68.00	0.00	2417.00	7603.70	0.00	-5186.70
166+25	0.01	41.59	0.00	0.00	37.00	0.00	2417.00	7651.80	0.00	-5234.80
166+50	0.00	33.64	0.00	0.00	35.00	0.00	2417.00	7697.30	0.00	-5280.30
167+00	0.57	20.99	0.00	1.00	51.00	0.00	2418.00	7763.60	0.00	-5345.60
167+50	0.98	23.25	0.00	1.00	41.00	0.00	2419.00	7816.90	0.00	-5397.90
168+00	0.36	16.53	0.00	1.00	37.00	0.00	2420.00	7865.00	0.00	-5445.00
168+50	0.00	24.36	0.00	0.00	38.00	0.00	2420.00	7914.40	0.00	-5494.40
169+00	0.17	32.60	0.00	0.00	53.00	0.00	2420.00	7983.30	0.00	-5563.30
169+50	0.24	40.35	0.00	0.00	68.00	0.00	2420.00	8071.70	0.00	-5651.70
170+00	0.07	59.63	0.00	0.00	93.00	0.00	2420.00	8192.60	0.00	-5772.60
170+50	0.00	58.96	0.00	0.00	110.00	0.00	2420.00	8335.60	0.00	-5915.60
171+00	0.00	67.21	0.00	0.00	117.00	0.00	2420.00	8487.70	0.00	-6067.70
171+50	0.16	43.91	0.00	0.00	103.00	0.00	2420.00	8621.60	0.00	-6201.60
172+00	1.21	20.46	0.00	1.00	60.00	0.00	2421.00	8699.60	0.00	-6278.60
172+50	3.61	16.58	0.00	4.00	34.00	0.00	2425.00	8743.80	0.00	-6318.80
173+00	4.84	23.79	0.00	8.00	37.00	0.00	2433.00	8791.90	0.00	-6358.90
173+50	5.33	31.37	0.00	9.00	51.00	0.00	2442.00	8858.20	0.00	-6416.20
174+00	2.02	31.69	0.00	7.00	58.00	0.00	2449.00	8933.60	0.00	-6484.60
174+50	1.71	21.49	0.00	3.00	49.00	0.00	2452.00	8997.30	0.00	-6545.30
175+00	2.95	8.17	0.00	4.00	27.00	0.00	2456.00	9032.40	0.00	-6576.40
175+08	3.04	8.40	0.00	1.00	2.00	0.00	2457.00	9035.00	0.00	-6578.00
175+50	4.42	14.34	0.00	6.00	18.00	0.00	2463.00	9058.40	0.00	-6595.40
176+00	6.27	11.68	0.00	10.00	24.00	0.00	2473.00	9089.60	0.00	-6616.60
176+50	5.77	24.92	0.00	11.00	34.00	0.00	2484.00	9133.80	0.00	-6649.80
177+00	7.22	41.22	0.00	12.00	61.00	0.00	2496.00	9213.10	0.00	-6717.10
177+50	8.85	68.37	0.00	15.00	101.00	0.00	2511.00	9344.40	0.00	-6833.40
178+00	8.62	50.43	0.00	16.00	110.00	0.00	2527.00	9487.40	0.00	-6960.40
178+50	8.71	47.31	0.00	16.00	91.00	0.00	2543.00	9605.70	0.00	-7062.70
179+00	5.85	46.84	0.00	13.00	87.00	0.00	2556.00	9718.80	0.00	-7162.80
179+50	2.38	87.98	0.00	8.00	125.00	0.00	2564.00	9881.30	0.00	-7317.30
180+00	1.38	88.49	0.00	3.00	163.00	0.00	2567.00	10093.20	0.00	-7526.20

DIVISION 1 - CTH D

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT	EXPANDED	EXPANDED	MASS ORDNATE
							1.00	FILL 1.30	ROCK 1.10	
180+50	2.80	29.61	0.00	4.00	109.00	0.00	2571.00	10234.90	0.00	-7663.90
181+00	4.77	1.74	0.00	7.00	29.00	0.00	2578.00	10272.60	0.00	-7694.60
181+50	6.70	1.44	0.00	11.00	3.00	0.00	2589.00	10276.50	0.00	-7687.50
182+00	13.88	2.89	0.00	19.00	4.00	0.00	2608.00	10281.70	0.00	-7673.70
182+50	34.91	4.03	0.00	45.00	6.00	0.00	2653.00	10289.50	0.00	-7636.50
183+00	37.67	7.86	0.00	67.00	11.00	0.00	2720.00	10303.80	0.00	-7583.80
183+50	15.82	10.66	0.00	50.00	17.00	0.00	2770.00	10325.90	0.00	-7555.90
184+00	1.47	14.72	0.00	16.00	24.00	0.00	2786.00	10357.10	0.00	-7571.10
184+50	1.39	17.92	0.00	3.00	30.00	0.00	2789.00	10396.10	0.00	-7607.10
185+00	1.92	21.20	0.00	3.00	36.00	0.00	2792.00	10442.90	0.00	-7650.90
185+50	1.06	18.64	0.00	3.00	37.00	0.00	2795.00	10491.00	0.00	-7696.00
186+00	1.96	7.23	0.00	3.00	24.00	0.00	2798.00	10522.20	0.00	-7724.20
186+50	3.40	8.64	0.00	5.00	15.00	0.00	2803.00	10541.70	0.00	-7738.70
186+62	4.05	43.95	0.00	2.00	12.00	0.00	2805.00	10557.30	0.00	-7752.30
187+00	7.10	9.81	0.00	8.00	38.00	0.00	2813.00	10606.70	0.00	-7793.70
187+15	8.64	34.42	0.00	4.00	12.00	0.00	2817.00	10622.30	0.00	-7805.30
187+50	15.53	8.15	0.00	16.00	28.00	0.00	2833.00	10658.70	0.00	-7825.70
188+00	30.56	6.96	0.00	43.00	14.00	0.00	2876.00	10676.90	0.00	-7800.90
188+50	55.83	6.63	0.00	80.00	13.00	0.00	2956.00	10693.80	0.00	-7737.80
188+75	49.30	6.57	0.00	49.00	6.00	0.00	3005.00	10701.60	0.00	-7696.60
189+00	43.89	6.78	0.00	43.00	6.00	0.00	3048.00	10709.40	0.00	-7661.40
189+43	3.10	22.85	0.00	37.00	24.00	0.00	3085.00	10740.60	0.00	-7655.60
189+50	25.58	18.71	0.00	4.00	5.00	0.00	3089.00	10747.10	0.00	-7658.10
190+00	27.36	72.32	0.00	49.00	84.00	0.00	3138.00	10856.30	0.00	-7718.30
190+50	19.08	102.83	0.00	43.00	162.00	0.00	3181.00	11066.90	0.00	-7885.90
191+00	3.95	134.22	0.00	21.00	219.00	0.00	3202.00	11351.60	0.00	-8149.60
191+50	2.77	159.13	0.00	6.00	272.00	0.00	3208.00	11705.20	0.00	-8497.20
192+00	0.98	197.99	0.00	3.00	331.00	0.00	3211.00	12135.50	0.00	-8924.50
192+50	0.62	96.72	0.00	1.00	273.00	0.00	3212.00	12490.40	0.00	-9278.40
193+00	10.92	19.38	0.00	11.00	108.00	0.00	3223.00	12630.80	0.00	-9407.80
193+50	3.91	15.94	0.00	14.00	33.00	0.00	3237.00	12673.70	0.00	-9436.70
194+00	8.31	2.44	0.00	11.00	17.00	0.00	3248.00	12695.80	0.00	-9447.80
194+50	14.76	1.52	0.00	21.00	4.00	0.00	3269.00	12701.00	0.00	-9432.00
195+00	106.00	17.15	0.00	112.00	17.00	0.00	3381.00	12723.10	0.00	-9342.10
195+50	101.04	86.16	0.00	192.00	96.00	0.00	3573.00	12847.90	0.00	-9274.90
196+00	63.15	118.68	0.00	152.00	190.00	0.00	3725.00	13094.90	0.00	-9369.90
196+50	31.78	130.50	0.00	88.00	231.00	0.00	3813.00	13395.20	0.00	-9582.20
197+00	12.82	116.63	0.00	41.00	229.00	0.00	3854.00	13692.90	0.00	-9838.90
197+50	39.22	66.97	0.00	48.00	170.00	0.00	3902.00	13913.90	0.00	-10011.90
198+00	89.78	47.42	0.00	119.00	106.00	0.00	4021.00	14051.70	0.00	-10030.70
198+50	128.09	15.98	2.49	202.00	59.00	2.00	4223.00	14125.54	2.20	-9902.54
199+00	181.90	22.81	45.60	287.00	36.00	45.00	4510.00	14107.99	51.70	-9597.99
199+50	224.92	42.68	74.05	377.00	61.00	111.00	4887.00	14028.56	173.80	-9141.56
200+00	126.02	54.24	4.57	325.00	90.00	73.00	5212.00	14041.17	254.10	-8829.17
200+50	94.43	43.89	0.00	204.00	91.00	4.00	5416.00	14153.75	258.50	-8737.75
201+00	109.11	48.94	0.00	188.00	86.00	0.00	5604.00	14265.55	258.50	-8661.55
201+50	80.73	41.73	0.00	176.00	84.00	0.00	5780.00	14374.75	258.50	-8594.75
202+00	71.33	34.81	0.00	141.00	71.00	0.00	5921.00	14467.05	258.50	-8546.05
202+50	50.39	46.92	0.00	113.00	76.00	0.00	6034.00	14565.85	258.50	-8531.85
203+00	17.26	34.66	0.00	63.00	76.00	0.00	6097.00	14664.65	258.50	-8567.65
203+50	2.55	44.96	0.00	18.00	74.00	0.00	6115.00	14760.85	258.50	-8645.85
204+00	3.05	81.51	0.00	5.00	117.00	0.00	6120.00	14912.95	258.50	-8792.95
204+50	4.28	56.92	0.00	7.00	128.00	0.00	6127.00	15079.35	258.50	-8952.35
205+00	2.50	56.10	0.00	6.00	105.00	0.00	6133.00	15215.85	258.50	-9082.85
205+50	2.03	54.39	0.00	4.00	102.00	0.00	6137.00	15348.45	258.50	-9211.45

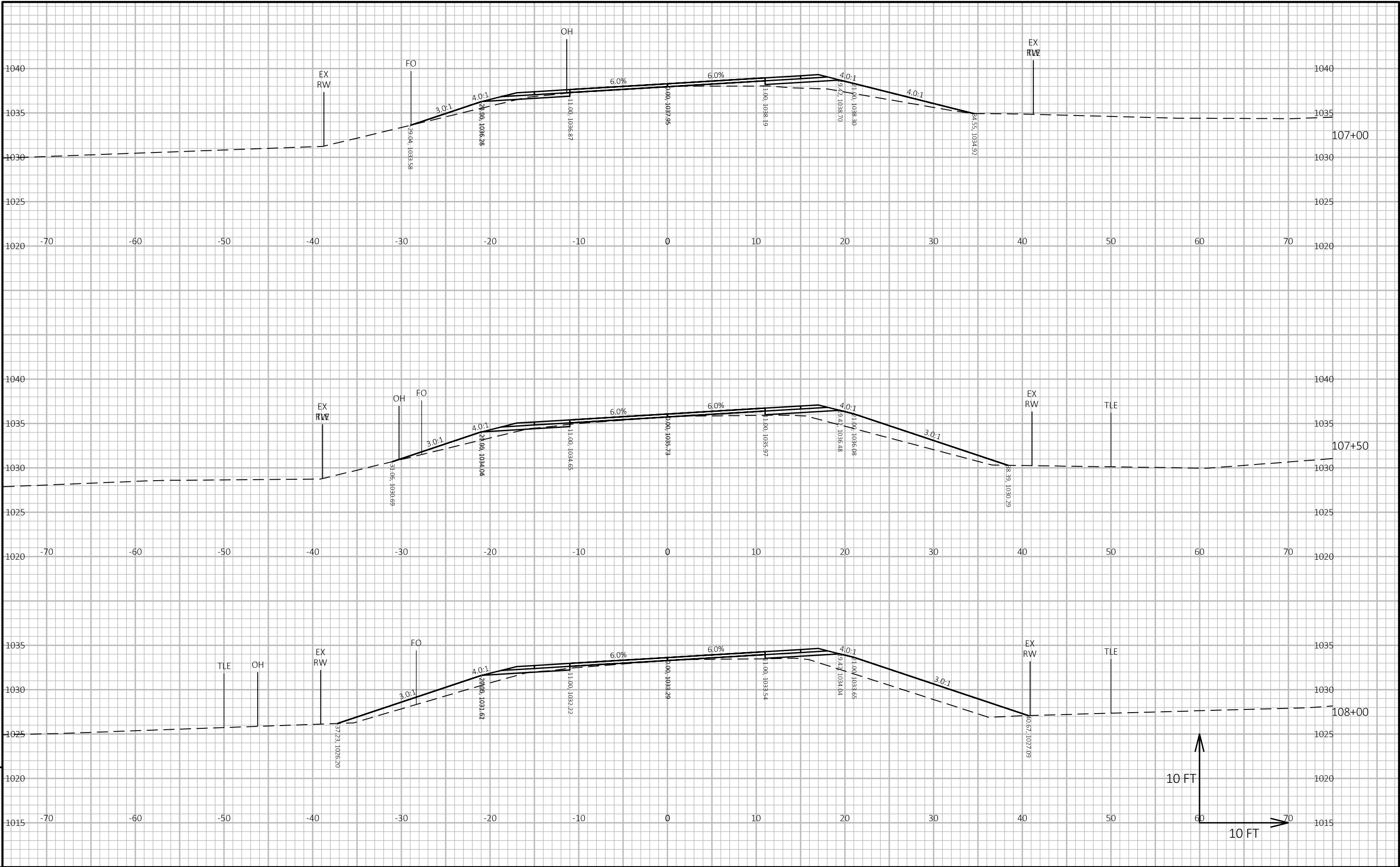
DIVISION 1 - CTH D

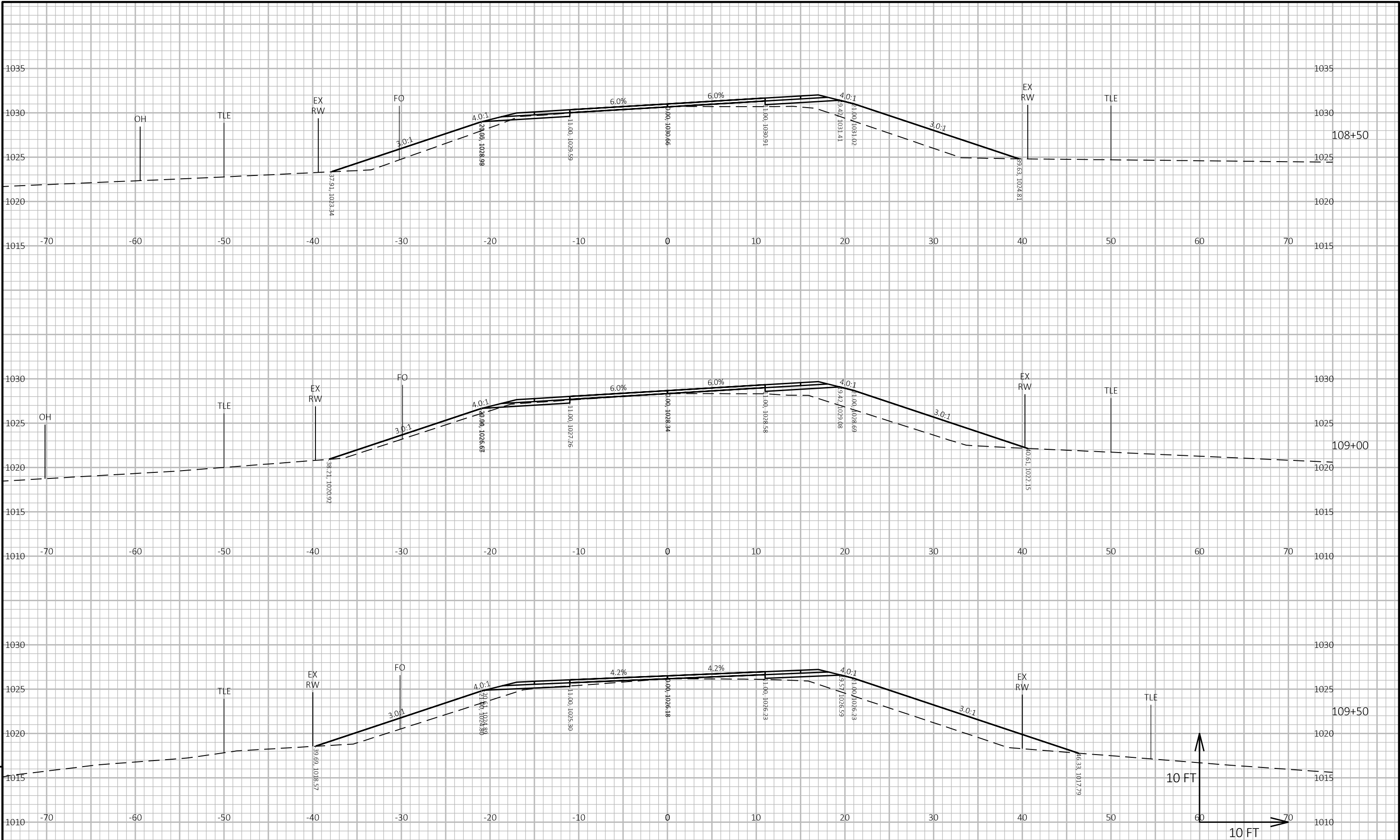
STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)			
	CUT	FILL	ROCK EXC	CUT	FILL	ROCK EXC	CUT	EXPANDED FILL	EXPANDED ROCK	MASS ORDNATE
							1.00	1.30	1.10	
206+00	4.27	36.54	0.00	6.00	84.00	0.00	6143.00	15457.65	258.50	-9314.65
206+50	10.87	11.56	0.00	14.00	45.00	0.00	6157.00	15516.15	258.50	-9359.15
207+00	17.89	11.22	0.00	27.00	21.00	0.00	6184.00	15543.45	258.50	-9359.45
207+50	56.17	12.40	0.00	69.00	22.00	0.00	6253.00	15572.05	258.50	-9319.05
208+00	61.06	0.90	0.00	109.00	12.00	0.00	6362.00	15587.65	258.50	-9225.65
208+25	50.53	1.82	0.00	52.00	1.00	0.00	6414.00	15588.95	258.50	-9174.95
208+50	48.09	1.90	0.00	46.00	2.00	0.00	6460.00	15591.55	258.50	-9131.55
209+00	58.57	0.02	0.00	99.00	2.00	0.00	6559.00	15594.15	258.50	-9035.15
209+50	88.43	0.00	0.00	136.00	0.00	0.00	6695.00	15594.15	258.50	-8899.15
210+00	80.95	0.08	0.00	157.00	0.00	0.00	6852.00	15594.15	258.50	-8742.15
210+50	50.97	1.61	0.00	122.00	2.00	0.00	6974.00	15596.75	258.50	-8622.75
211+00	6.08	4.07	0.00	53.00	5.00	0.00	7027.00	15603.25	258.50	-8576.25
211+50	2.26	13.65	0.00	8.00	16.00	0.00	7035.00	15624.05	258.50	-8589.05
212+00	2.67	13.65	0.00	5.00	25.00	0.00	7040.00	15656.55	258.50	-8616.55
212+50	5.50	10.45	0.00	8.00	22.00	0.00	7048.00	15685.15	258.50	-8637.15
212+63	15.25	6.83	0.00	5.00	4.00	0.00	7053.00	15690.35	258.50	-8637.35
212+82	9.18	2.71	0.00	9.00	3.00	0.00	7062.00	15694.25	258.50	-8632.25
213+00	7.79	8.23	0.00	6.00	4.00	0.00	7068.00	15699.45	258.50	-8631.45
213+50	5.47	9.69	0.00	12.00	17.00	0.00	7080.00	15721.55	258.50	-8641.55
214+00	3.26	11.61	0.00	8.00	20.00	0.00	7088.00	15747.55	258.50	-8659.55
214+50	3.63	7.87	0.00	6.00	18.00	0.00	7094.00	15770.95	258.50	-8676.95
214+71	10.57	2.77	0.00	6.00	4.00	0.00	7100.00	15776.15	258.50	-8676.15
215+00	12.62	4.47	0.00	12.00	4.00	0.00	7112.00	15781.35	258.50	-8669.35
215+50	18.25	7.54	0.00	29.00	11.00	0.00	7141.00	15795.65	258.50	-8654.65
215+75	11.05	7.79	0.00	14.00	7.00	0.00	7155.00	15804.75	258.50	-8649.75
216+00	2.36	20.85	0.00	6.00	13.00	0.00	7161.00	15821.65	258.50	-8660.65
216+50	10.20	6.15	0.00	12.00	25.00	0.00	7173.00	15854.15	258.50	-8681.15
217+00	5.64	7.88	0.00	15.00	13.00	0.00	7188.00	15871.05	258.50	-8683.05
217+50	8.73	5.20	0.00	13.00	12.00	0.00	7201.00	15886.65	258.50	-8685.65
218+00	3.86	6.55	0.00	12.00	11.00	0.00	7213.00	15900.95	258.50	-8687.95
218+50	6.97	7.50	0.00	10.00	13.00	0.00	7223.00	15917.85	258.50	-8694.85
219+00	6.70	7.52	0.00	13.00	14.00	0.00	7236.00	15936.05	258.50	-8700.05
219+50	4.80	15.27	0.00	11.00	21.00	0.00	7247.00	15963.35	258.50	-8716.35
220+00	6.12	6.41	0.00	10.00	20.00	0.00	7257.00	15989.35	258.50	-8732.35
220+50	22.95	66.64	0.00	27.00	68.00	0.00	7284.00	16077.75	258.50	-8793.75
221+00	37.56	127.85	0.00	56.00	180.00	0.00	7340.00	16311.75	258.50	-8971.75
221+50	12.40	212.38	0.00	46.00	315.00	0.00	7386.00	16721.25	258.50	-9335.25
222+00	7.19	149.69	0.00	18.00	335.00	0.00	7404.00	17156.75	258.50	-9752.75
222+50	12.79	41.60	0.00	18.00	177.00	0.00	7422.00	17386.85	258.50	-9964.85
223+00	11.32	16.66	0.00	22.00	54.00	0.00	7444.00	17457.05	258.50	-10013.05
223+40	6.05	12.80	0.00	13.00	22.00	0.00	7457.00	17485.65	258.50	-10028.65
223+50	9.22	13.51	0.00	3.00	5.00	0.00	7460.00	17492.15	258.50	-10032.15
224+00	4.56	45.61	0.00	13.00	55.00	0.00	7473.00	17563.65	258.50	-10090.65
224+50	2.39	74.61	0.00	6.00	111.00	0.00	7479.00	17707.95	258.50	-10228.95
225+00	16.57	3.73	0.00	18.00	73.00	0.00	7497.00	17802.85	258.50	-10305.85
225+50	18.97	2.72	0.00	33.00	6.00	0.00	7530.00	17810.65	258.50	-10280.65
226+00	13.74	23.99	0.00	30.00	25.00	0.00	7560.00	17843.15	258.50	-10283.15
226+38.5	21.10	10.68	0.00	25.00	25.00	0.00	7585.00	17875.65	258.50	-10290.65
226+50	22.17	18.95	0.00	9.00	6.00	0.00	7594.00	17883.45	258.50	-10289.45

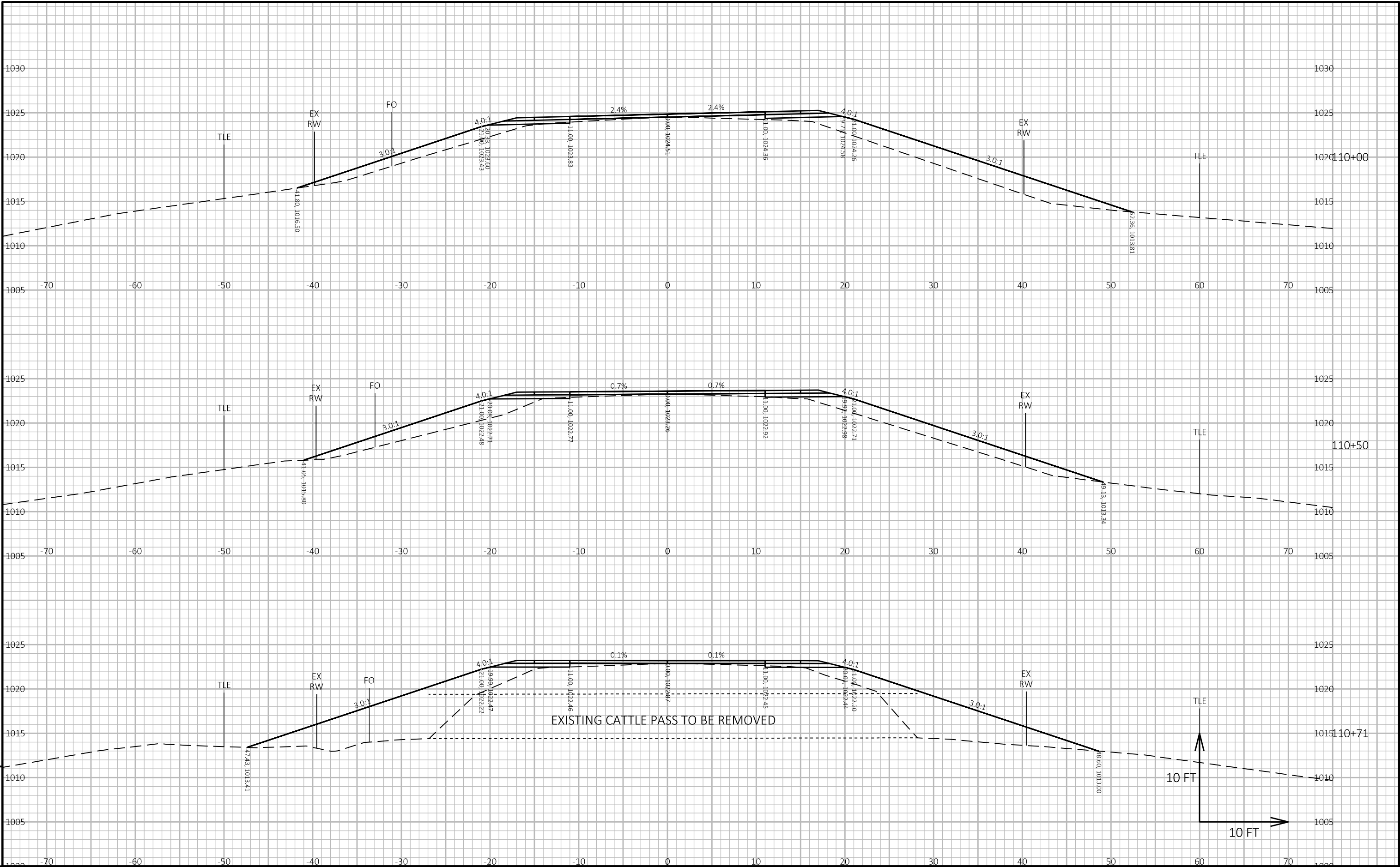


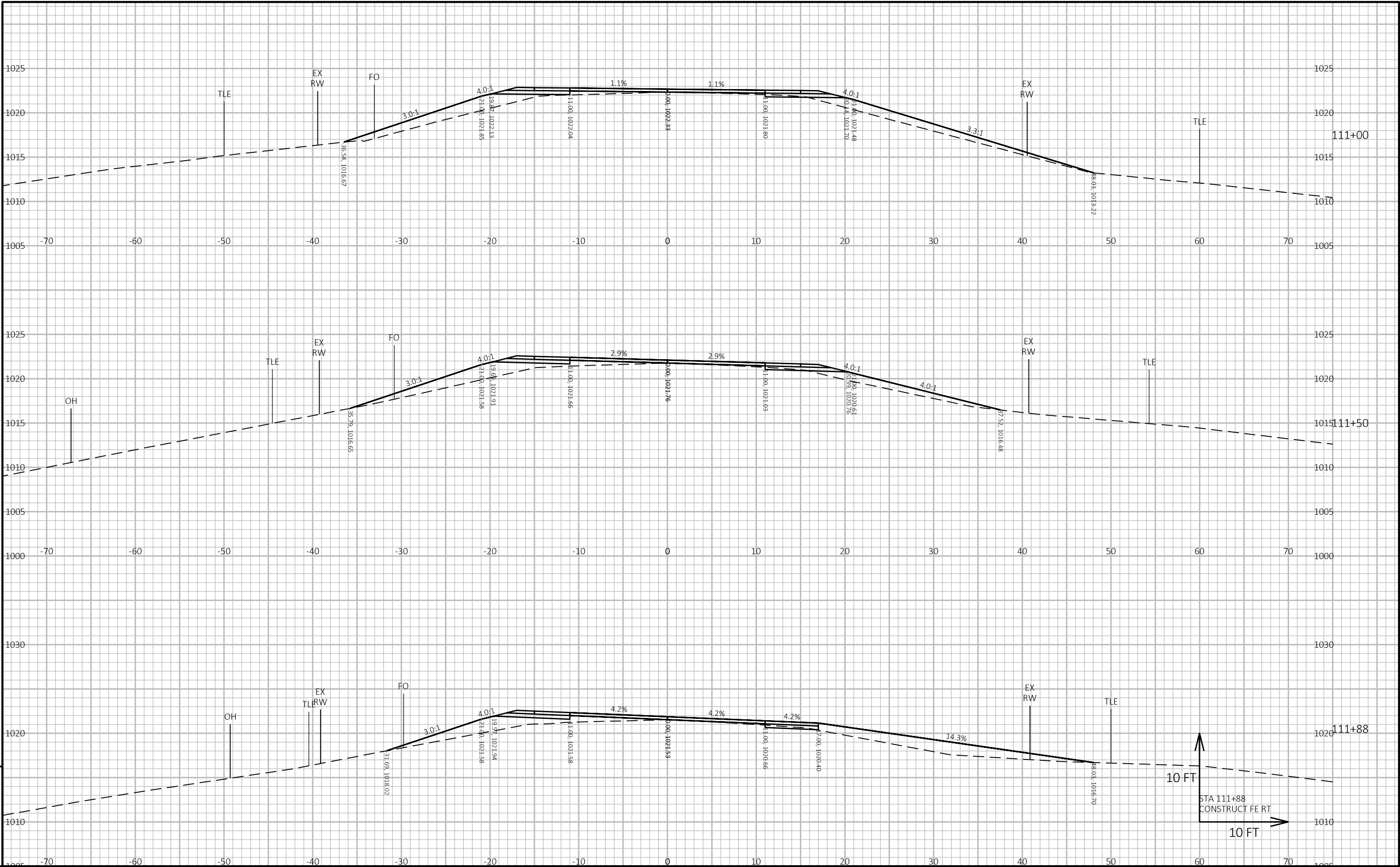
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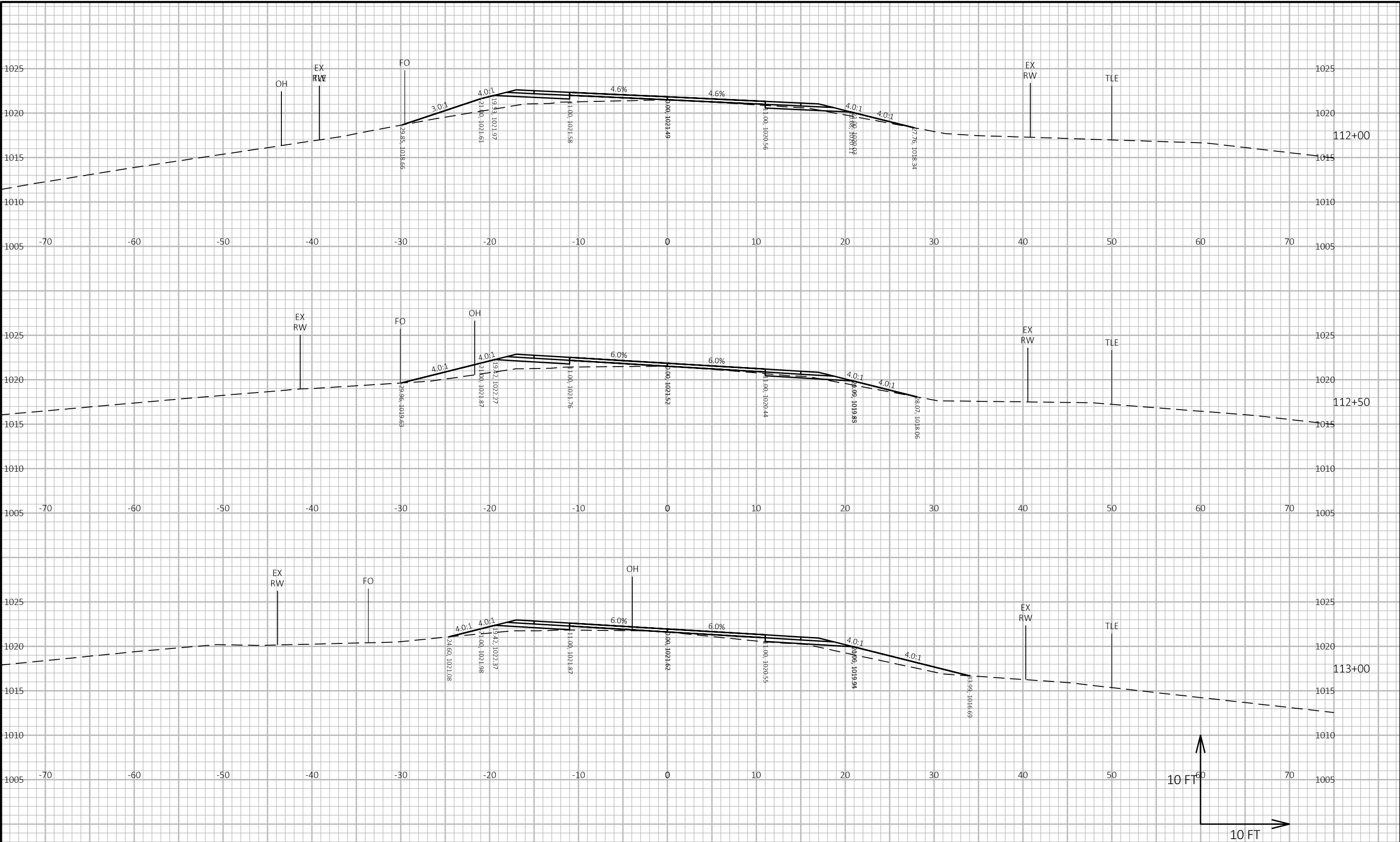
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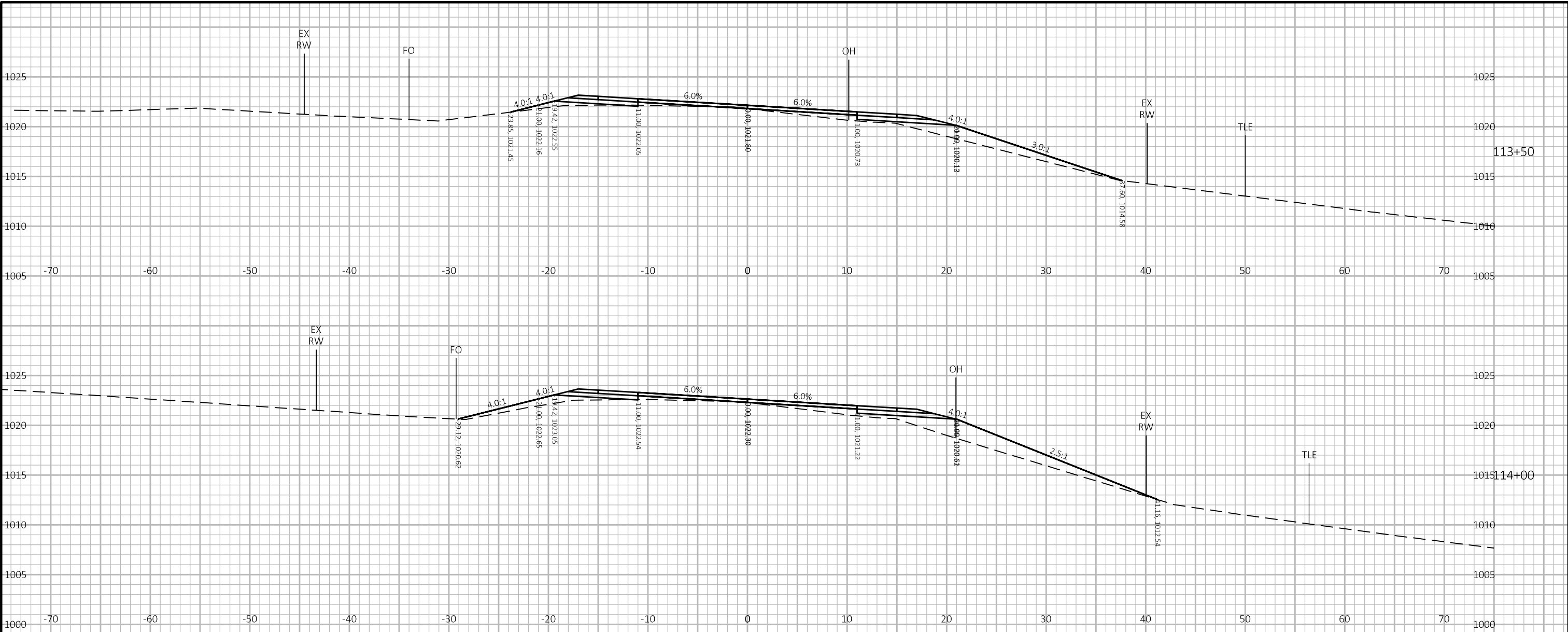






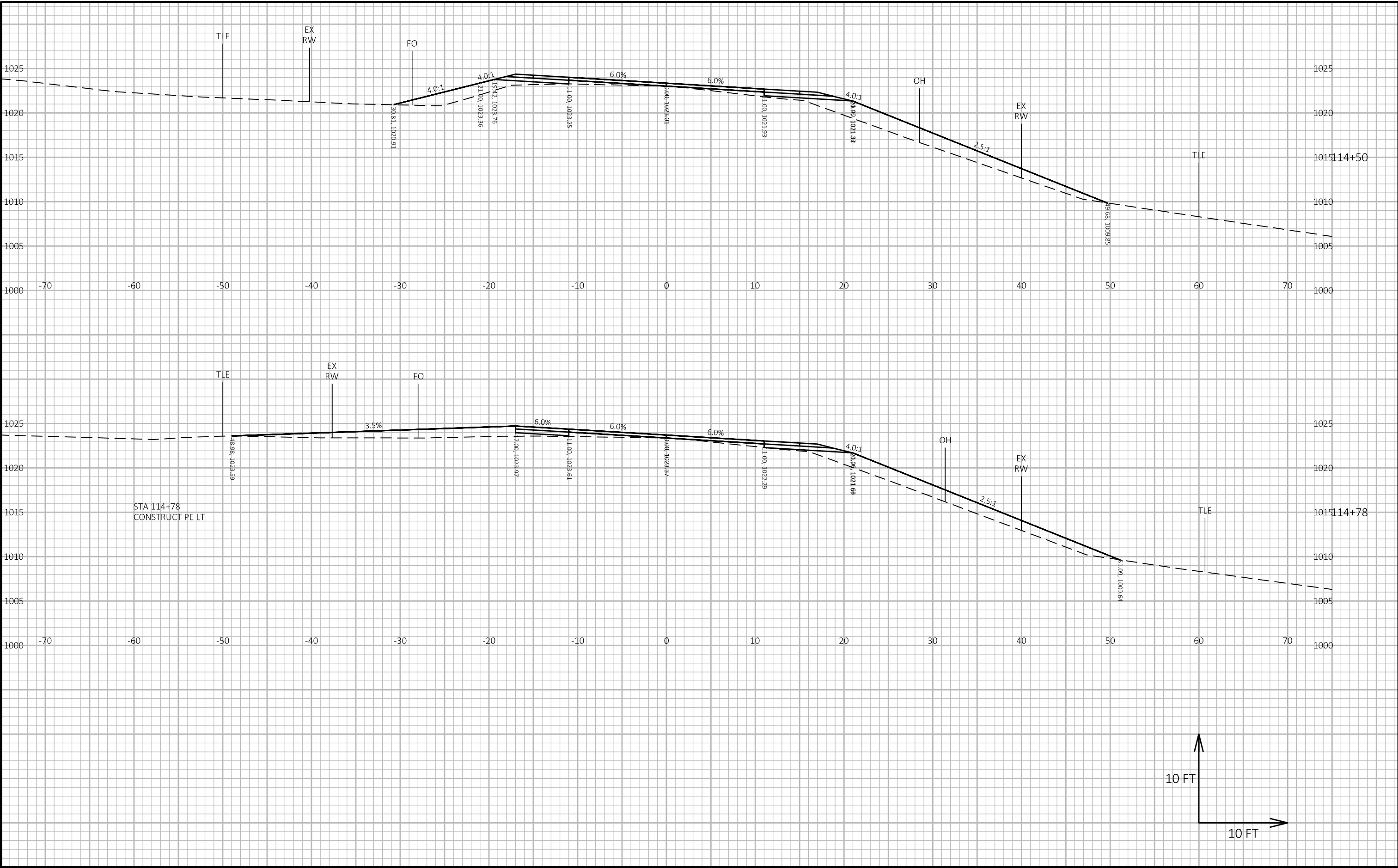


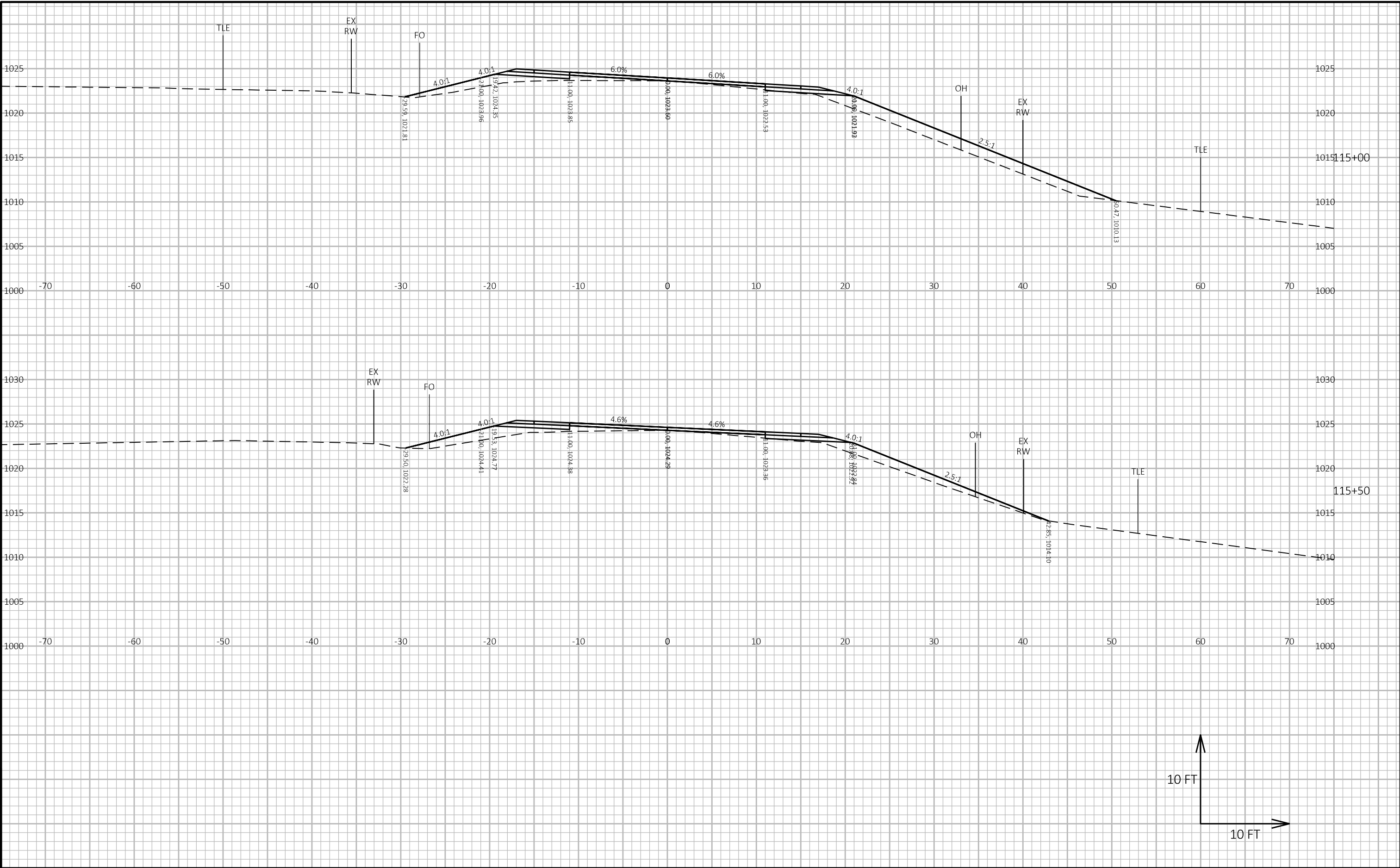


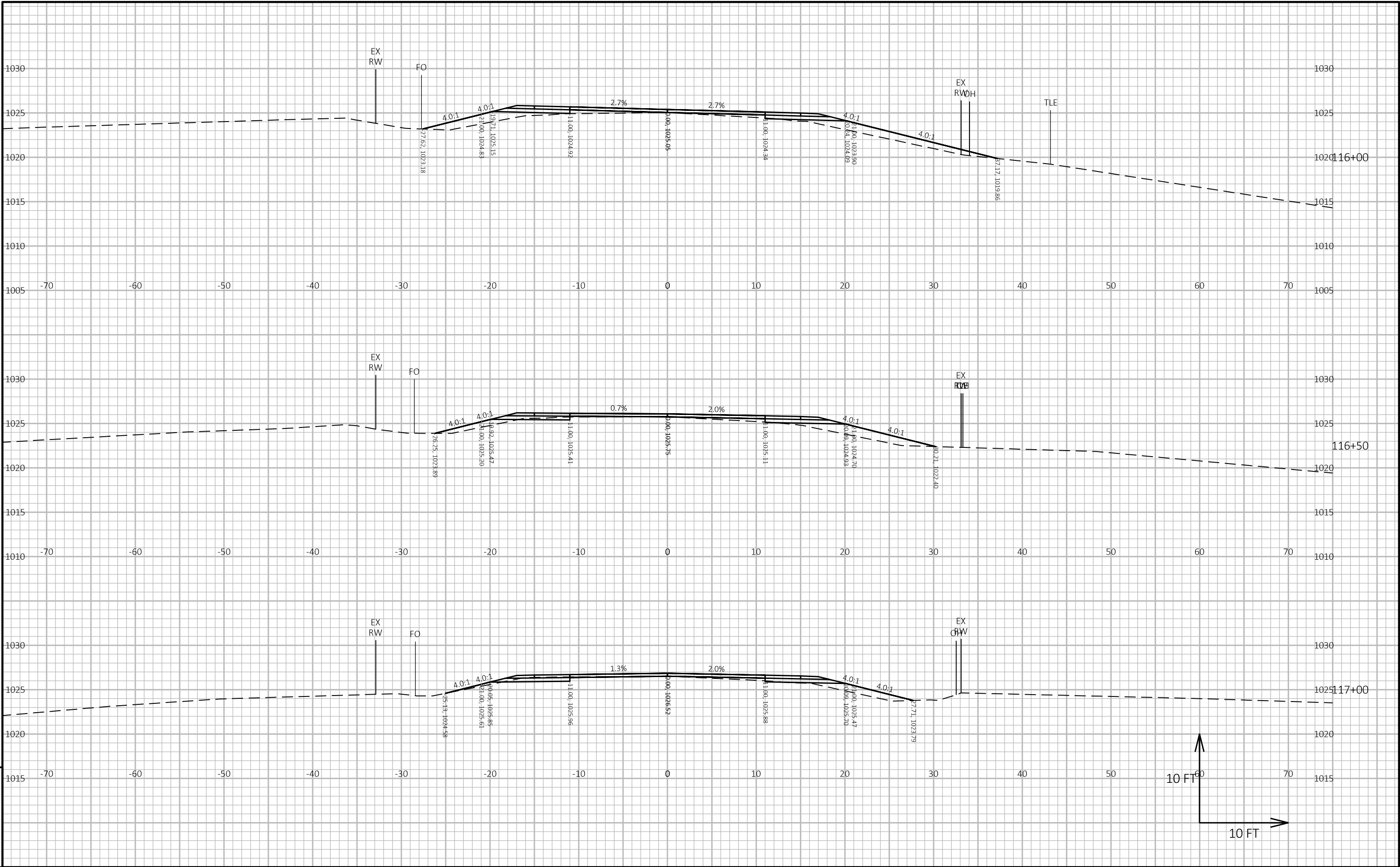


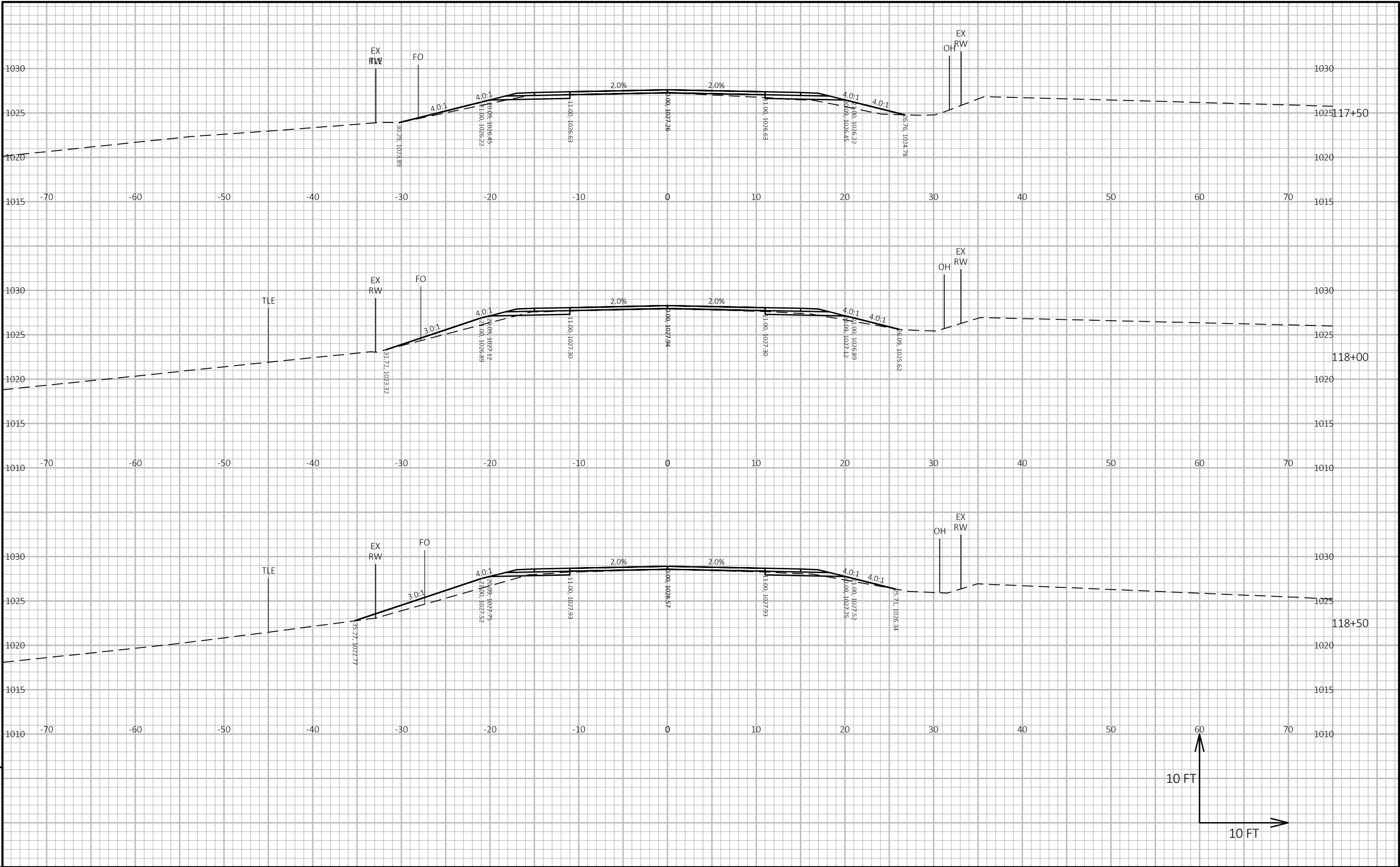
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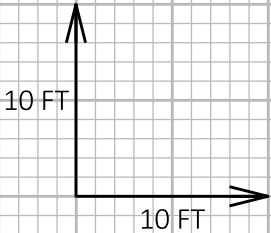
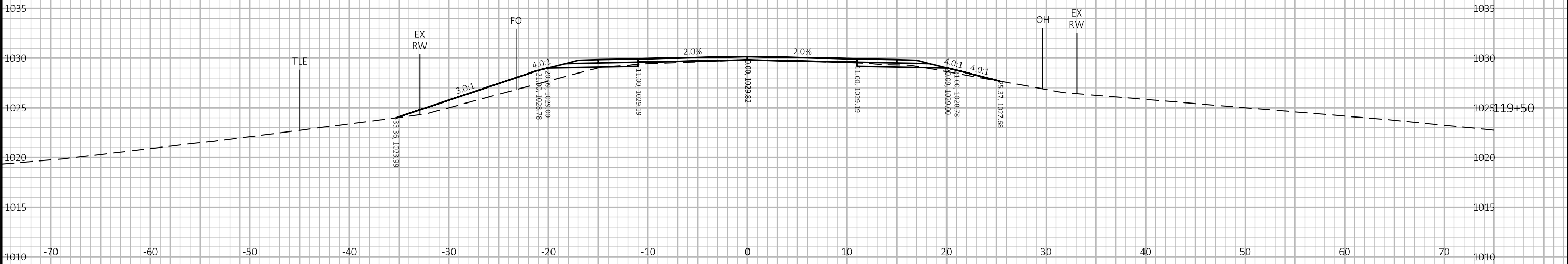
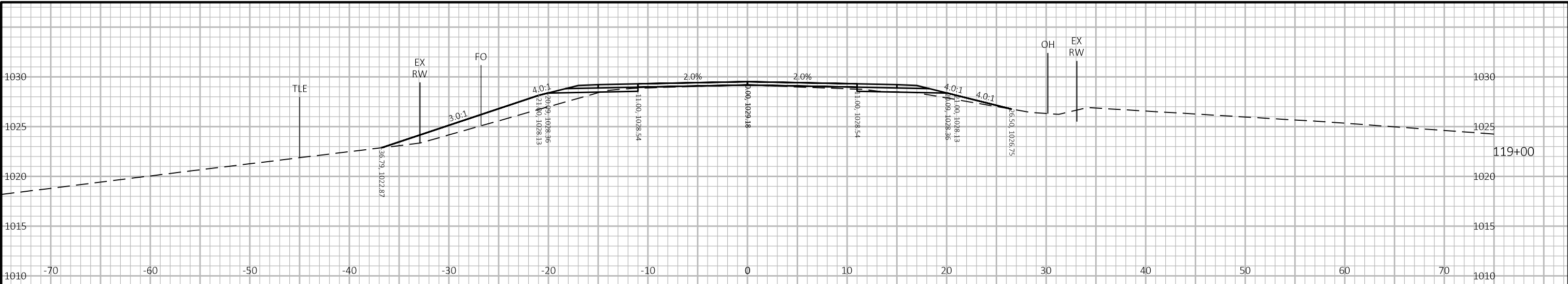
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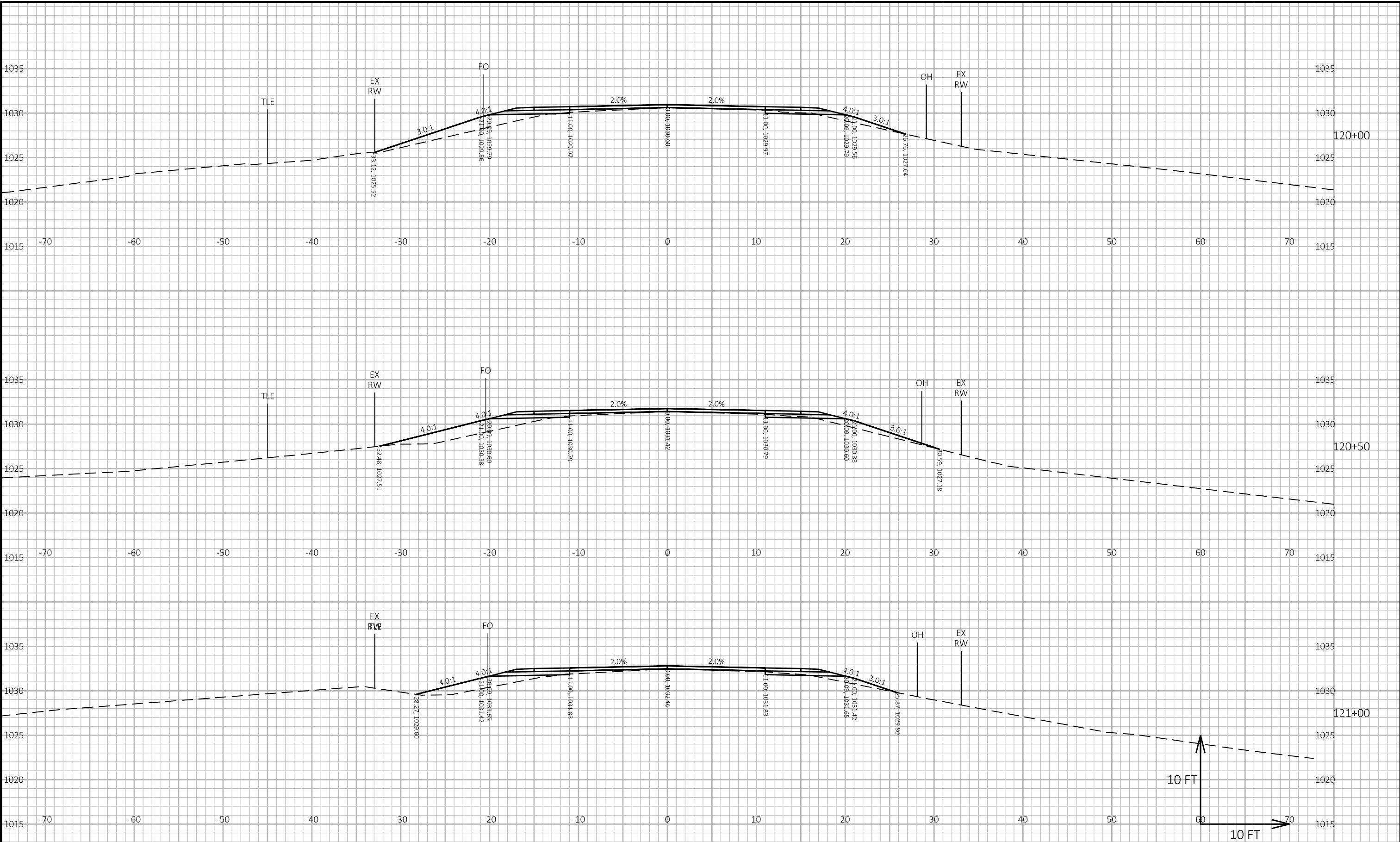


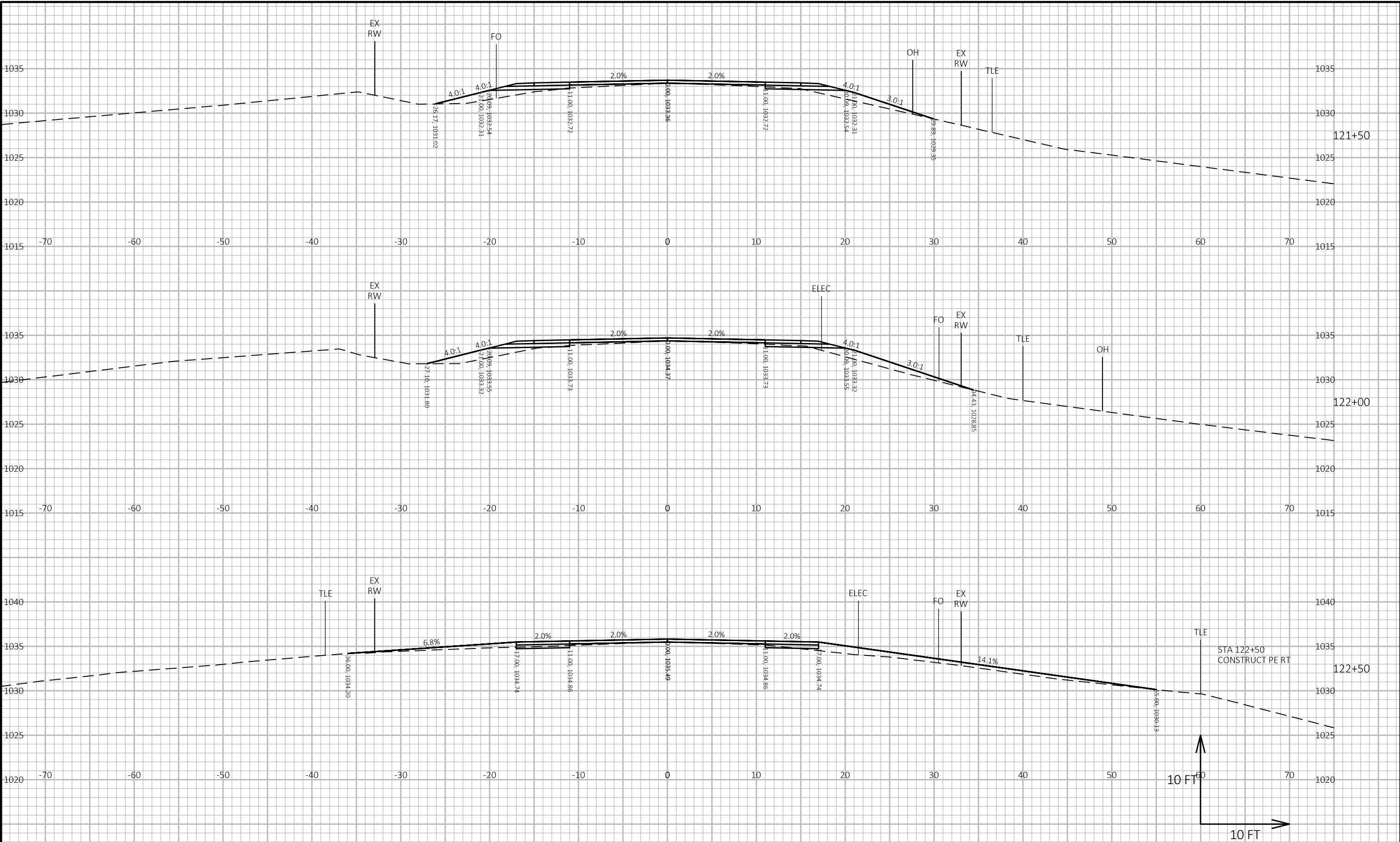


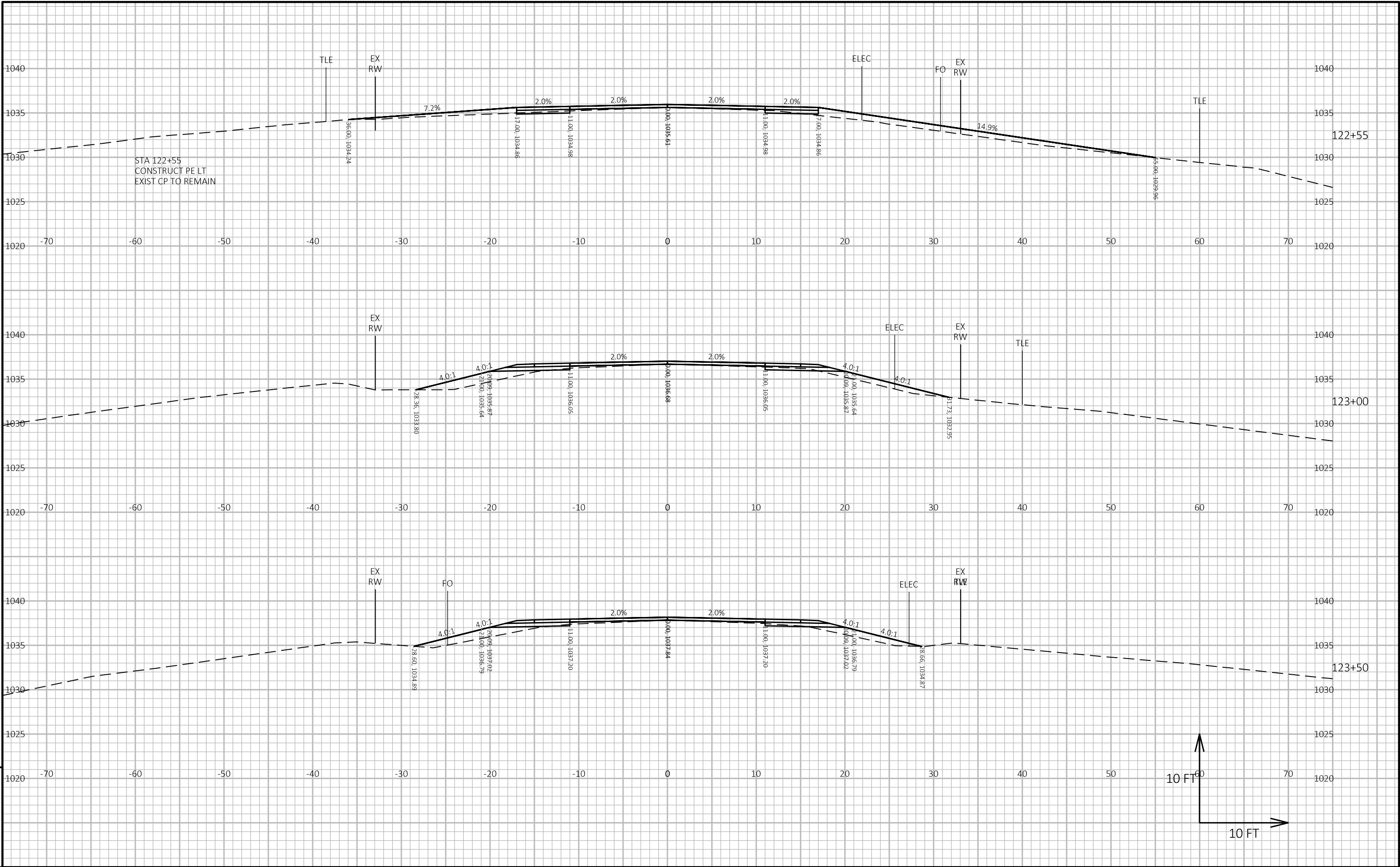


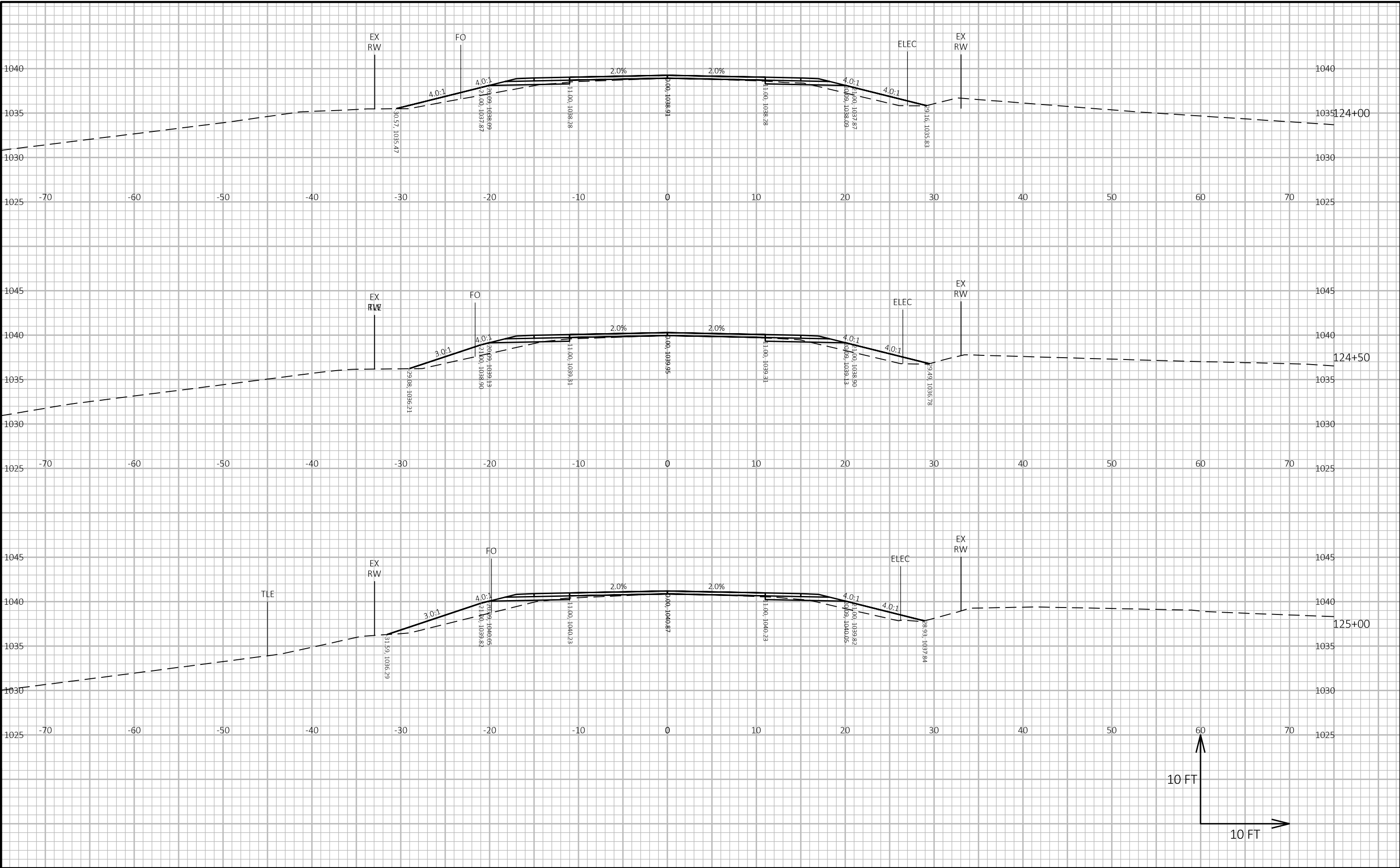
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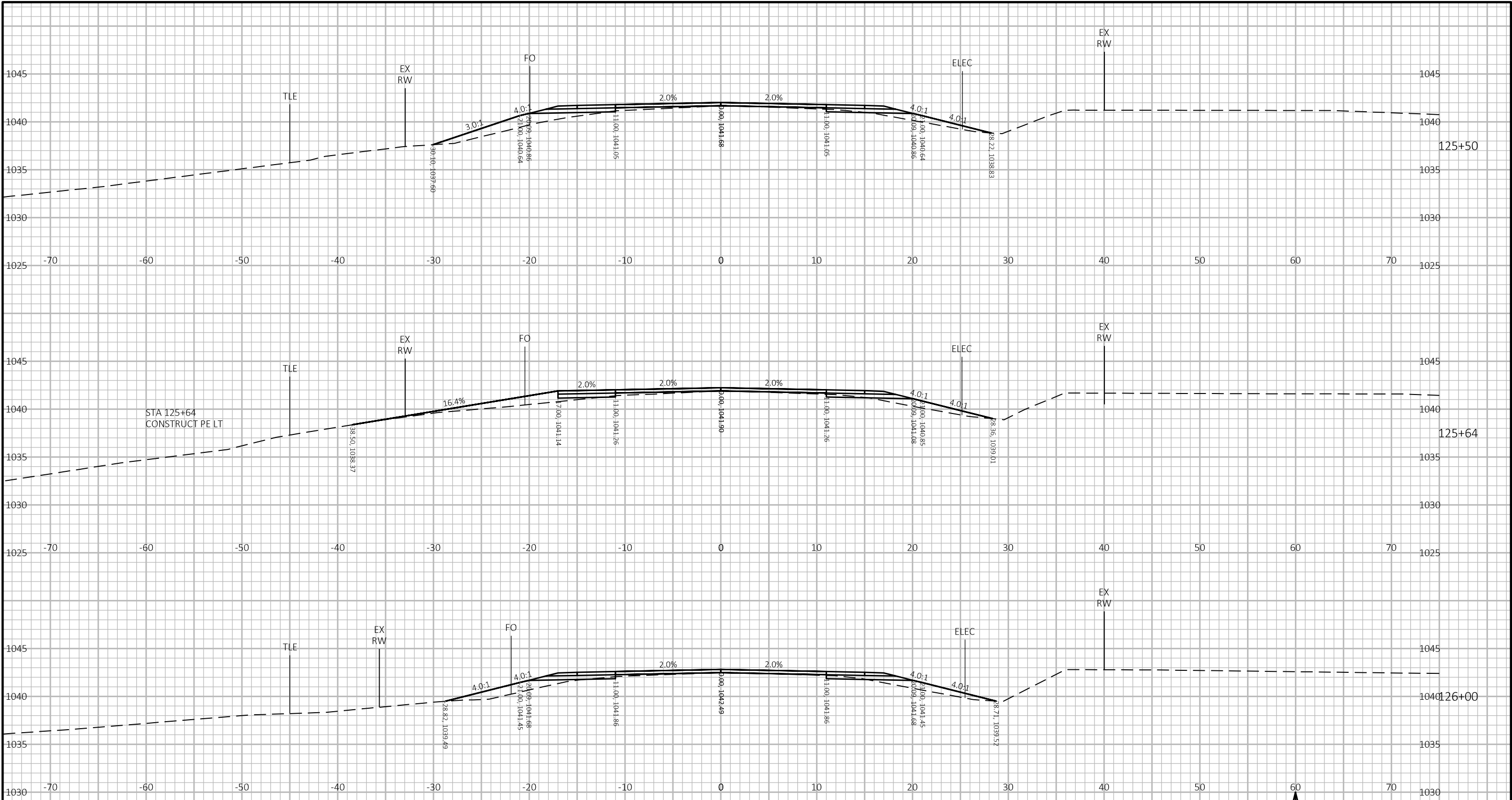
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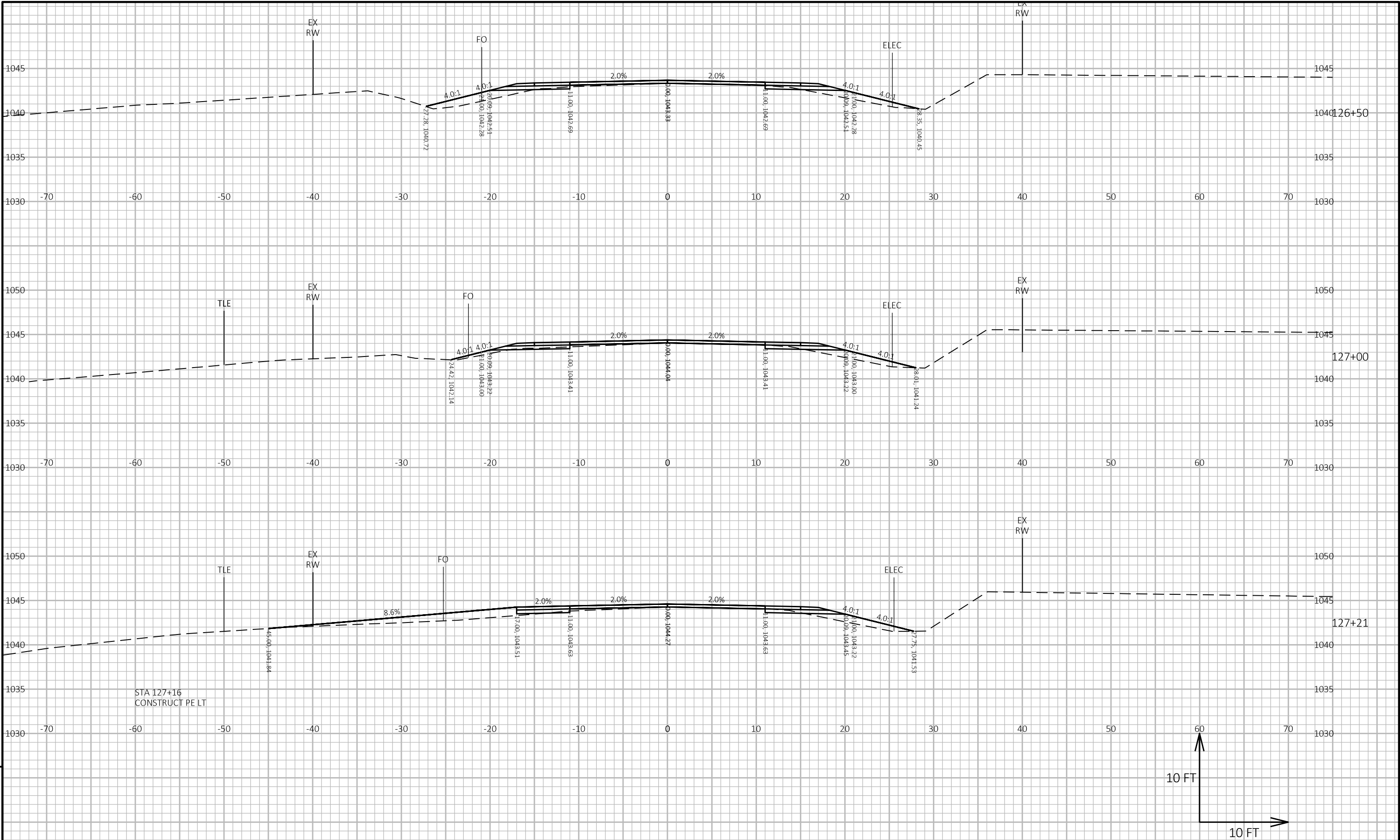




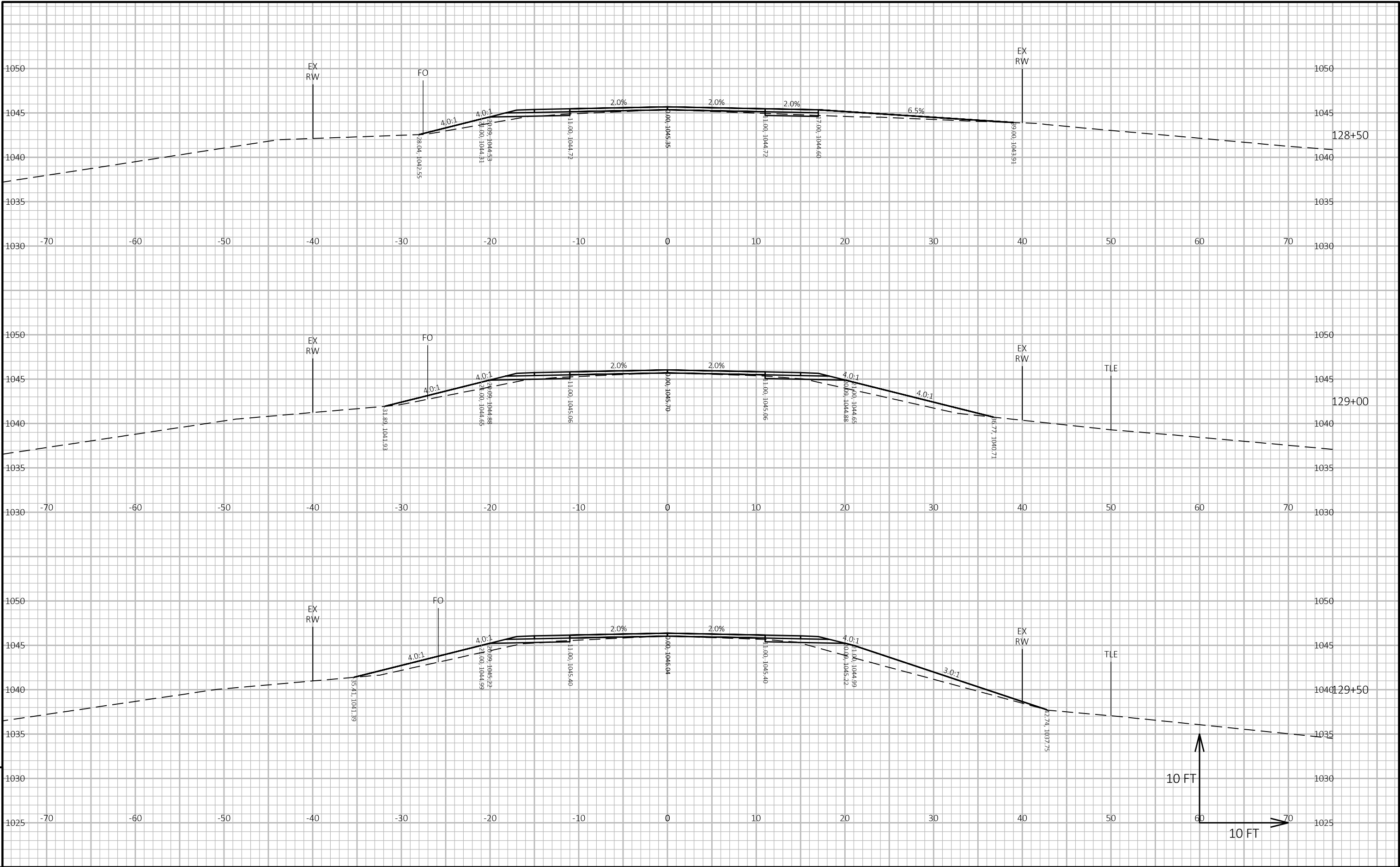


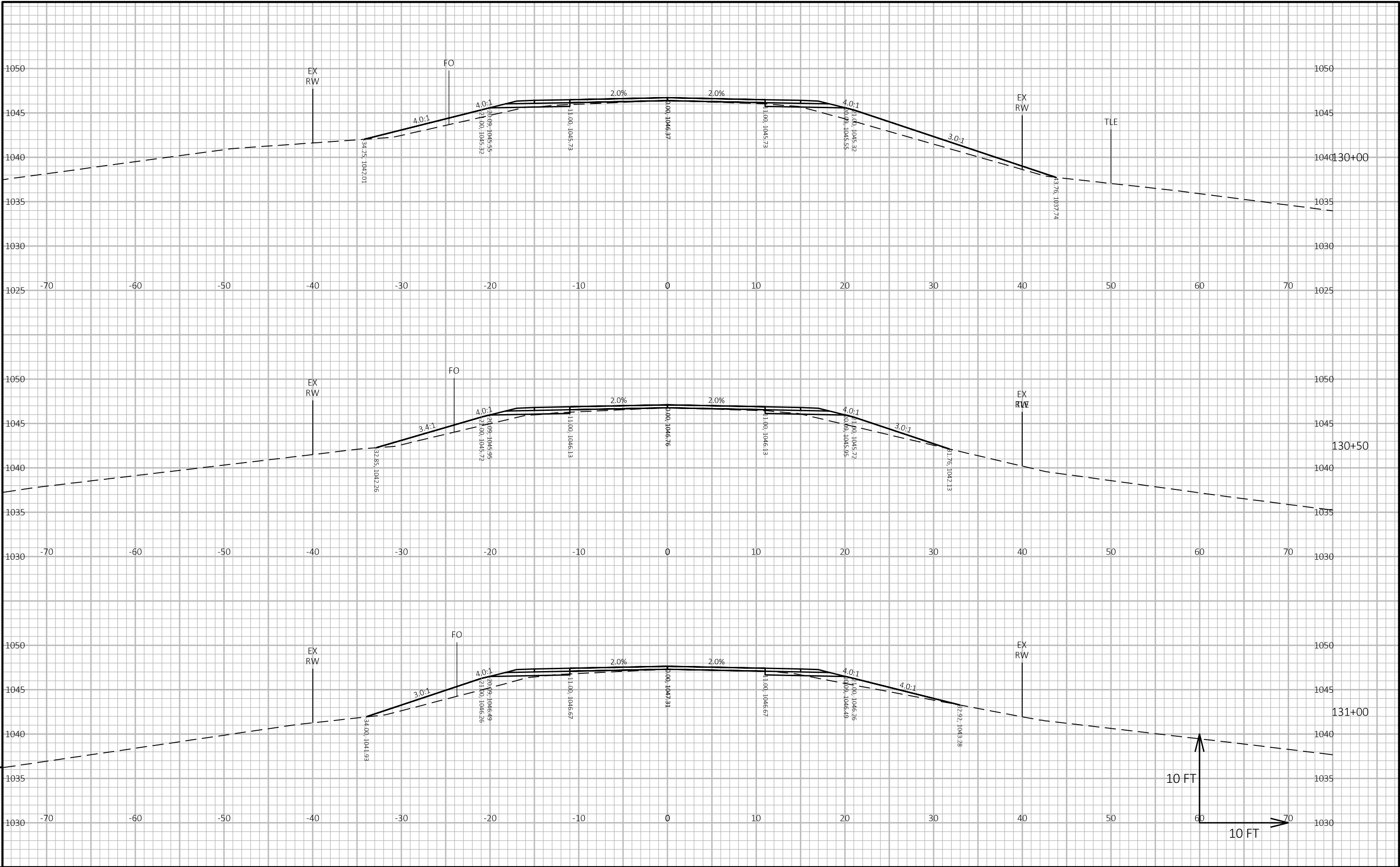
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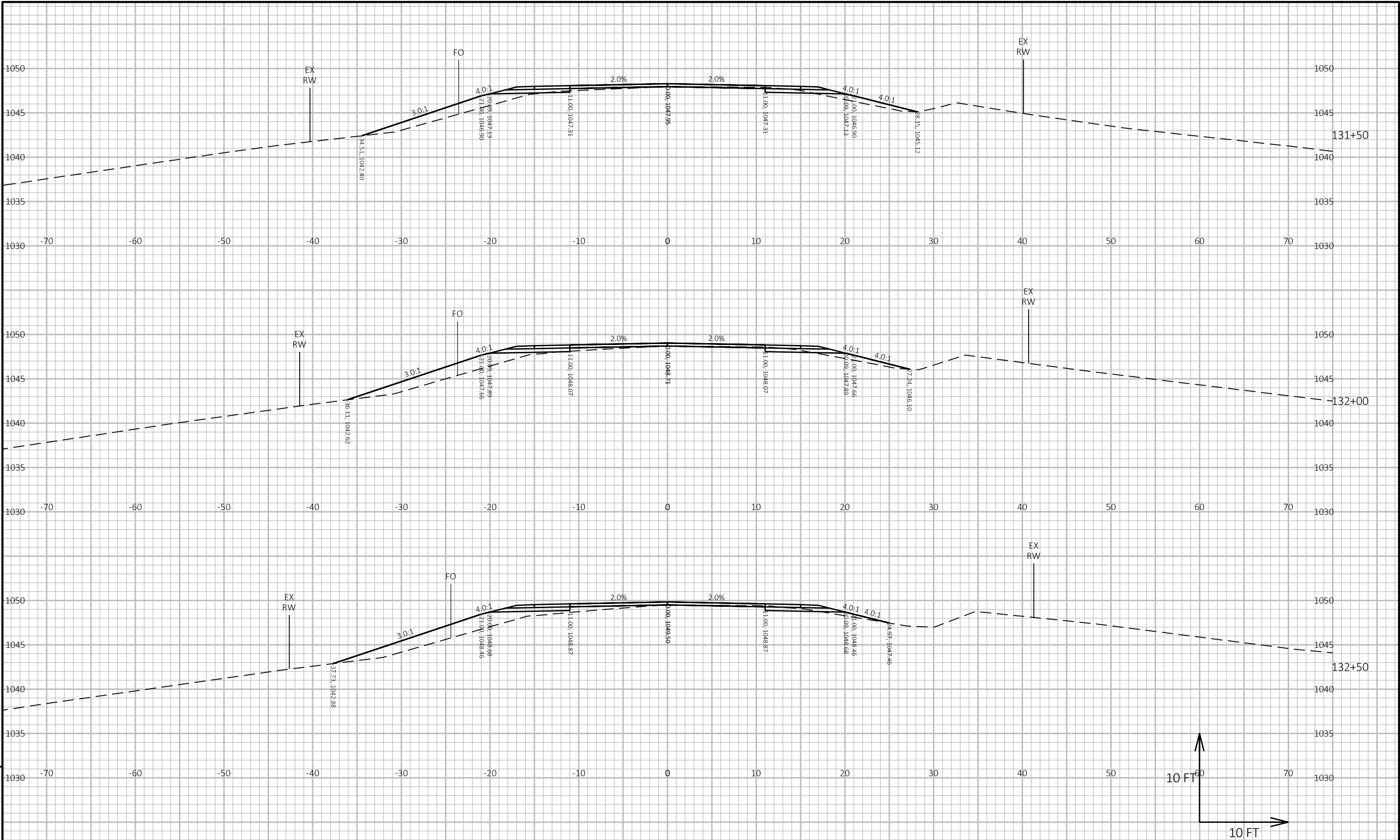
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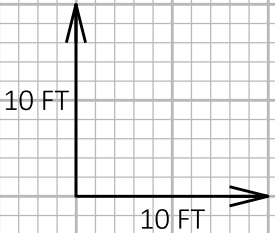
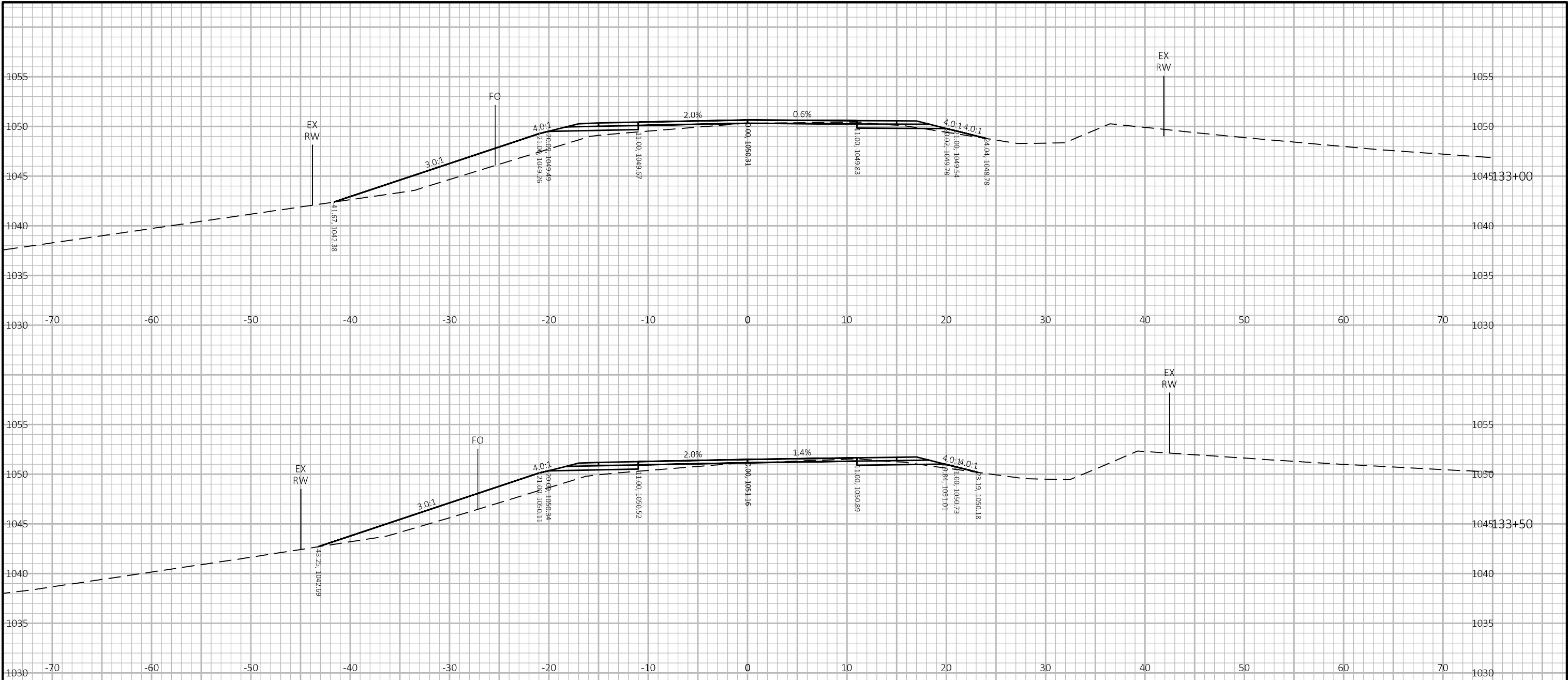


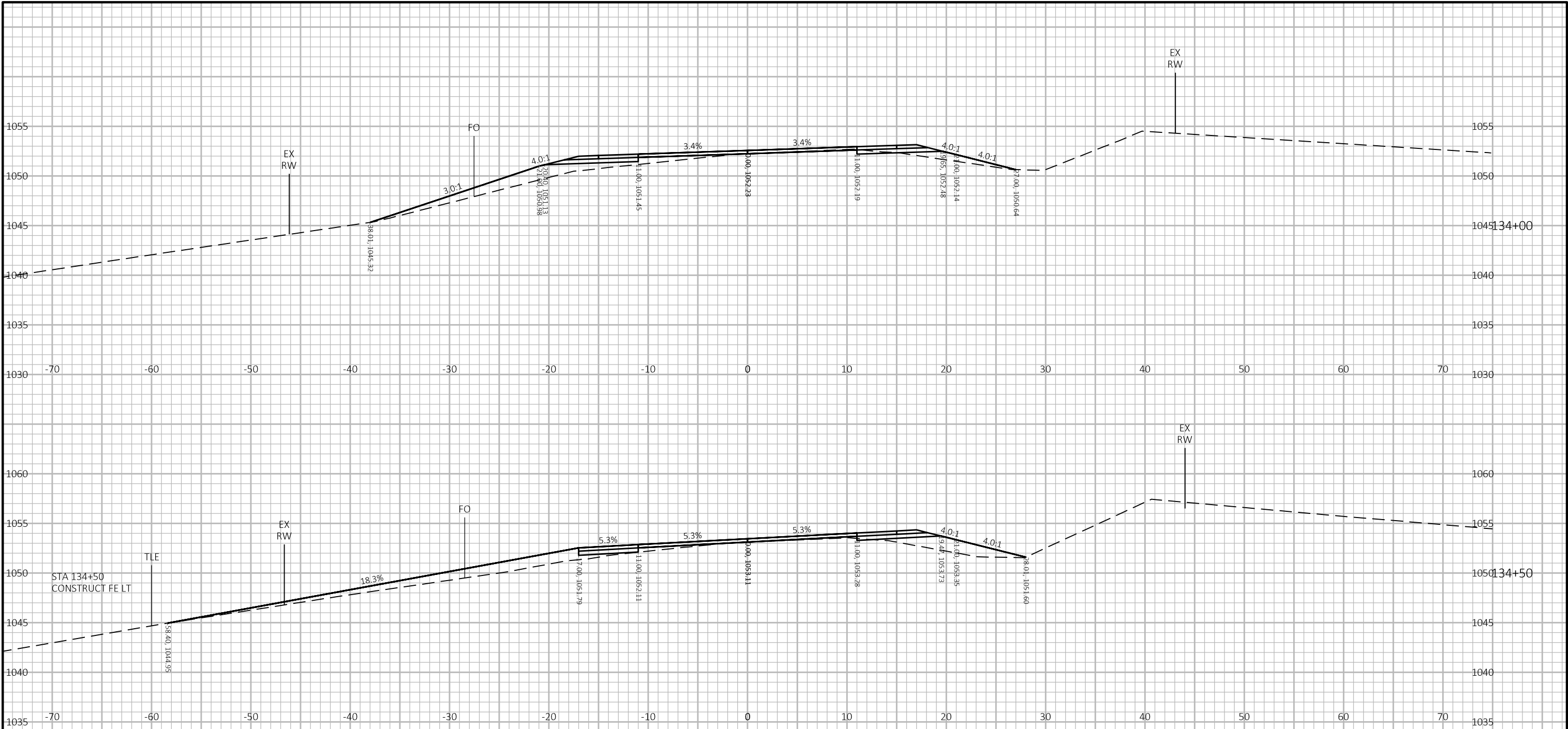






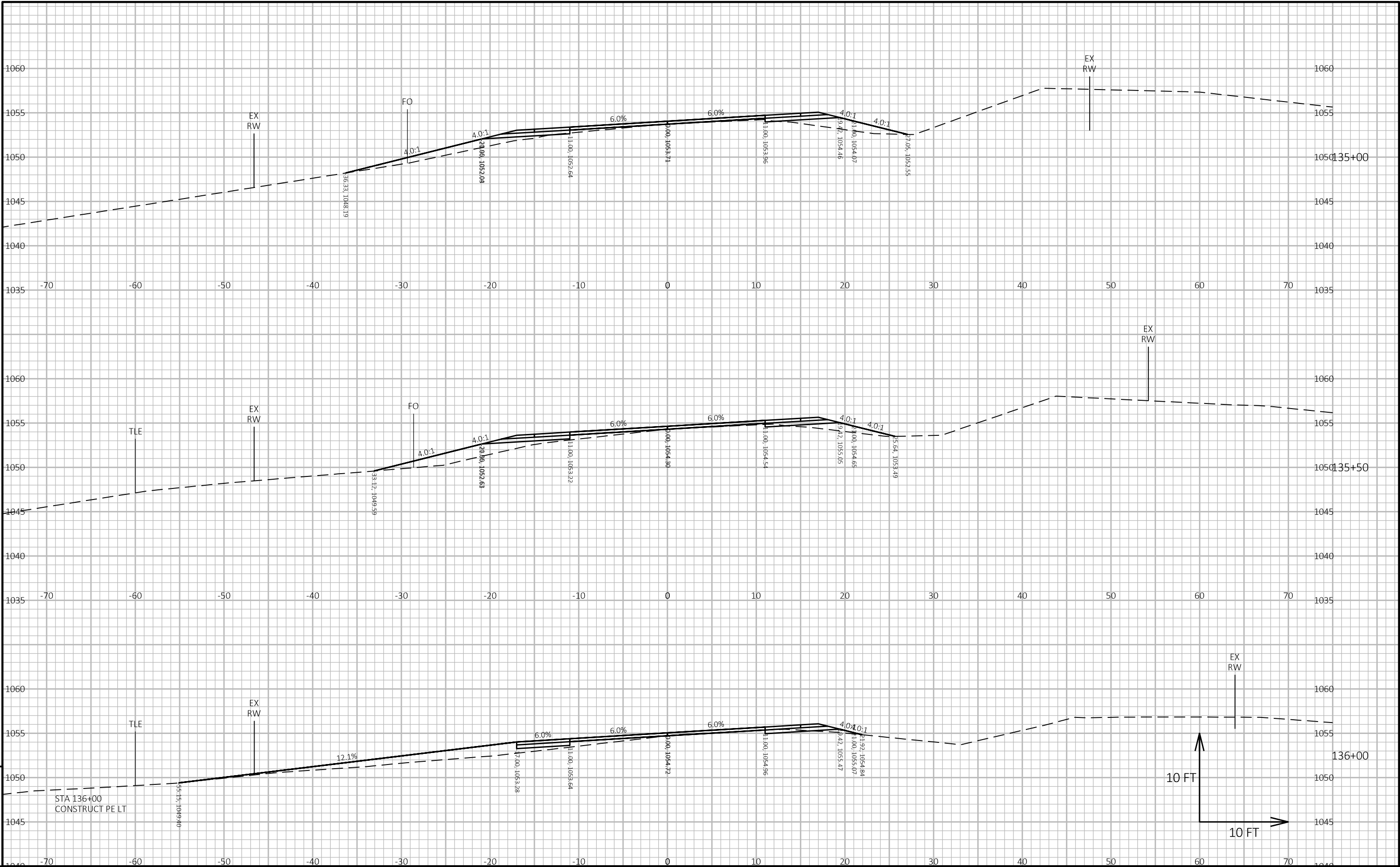


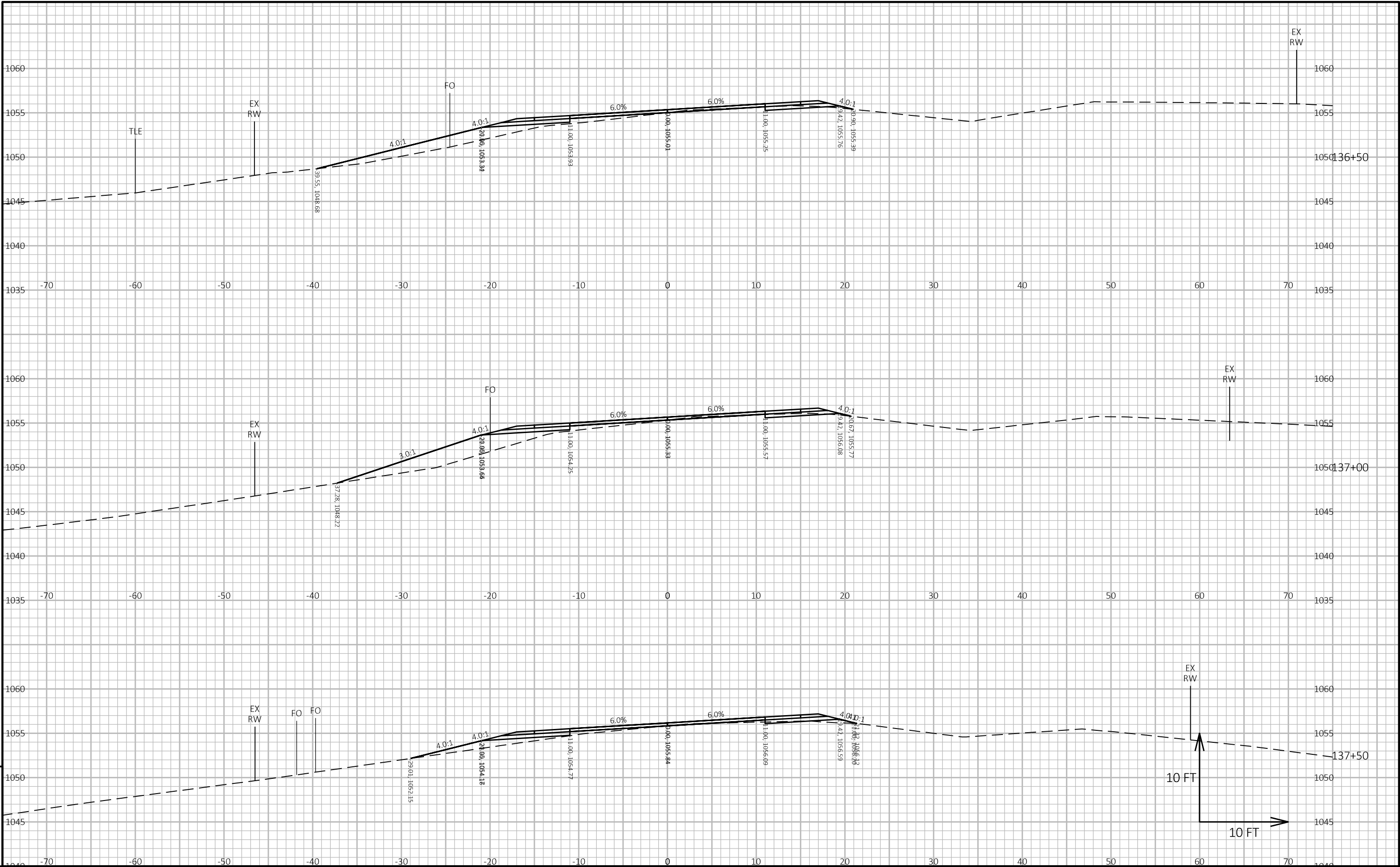


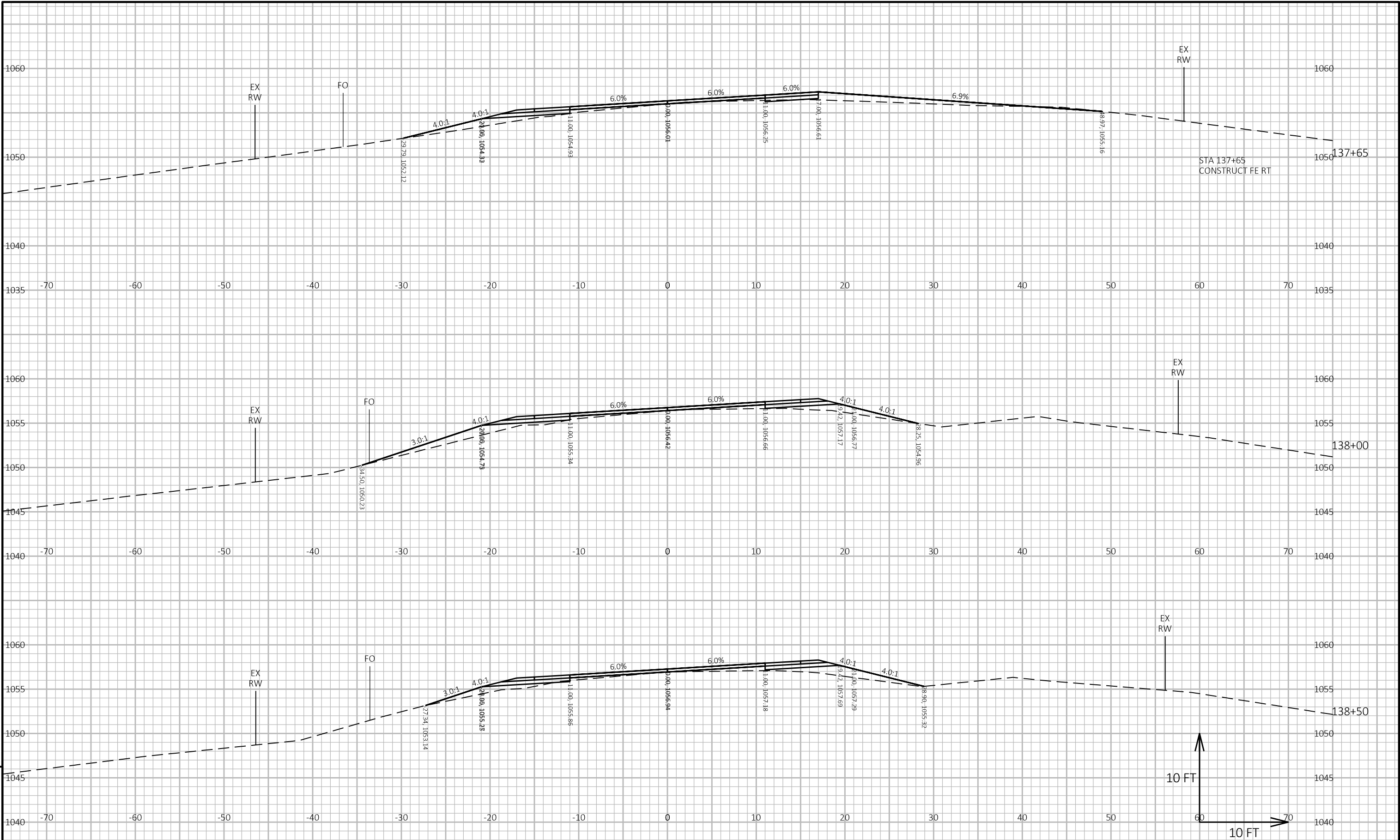


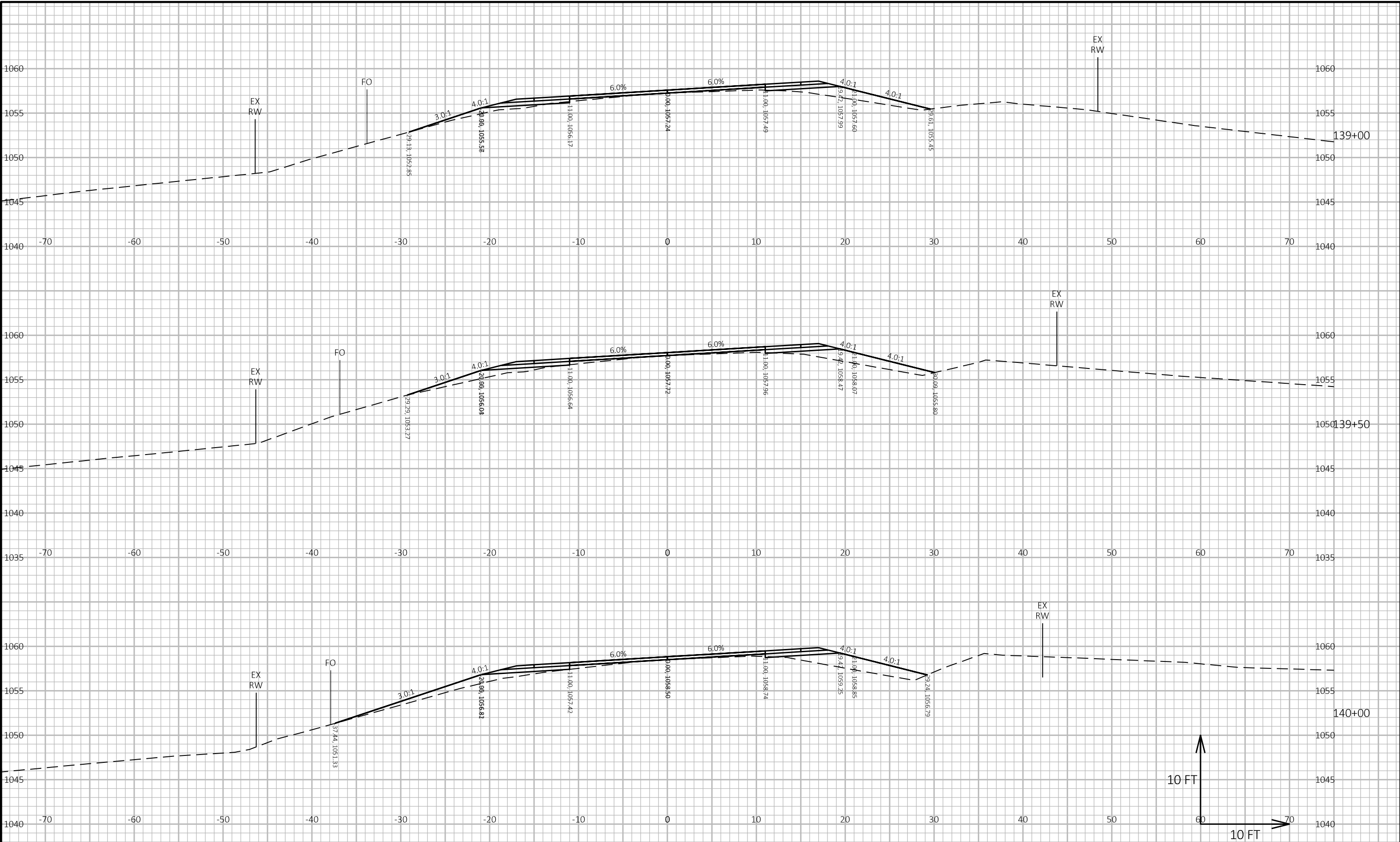
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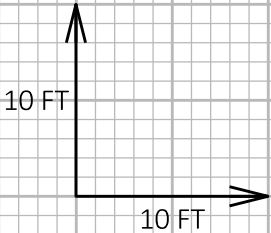
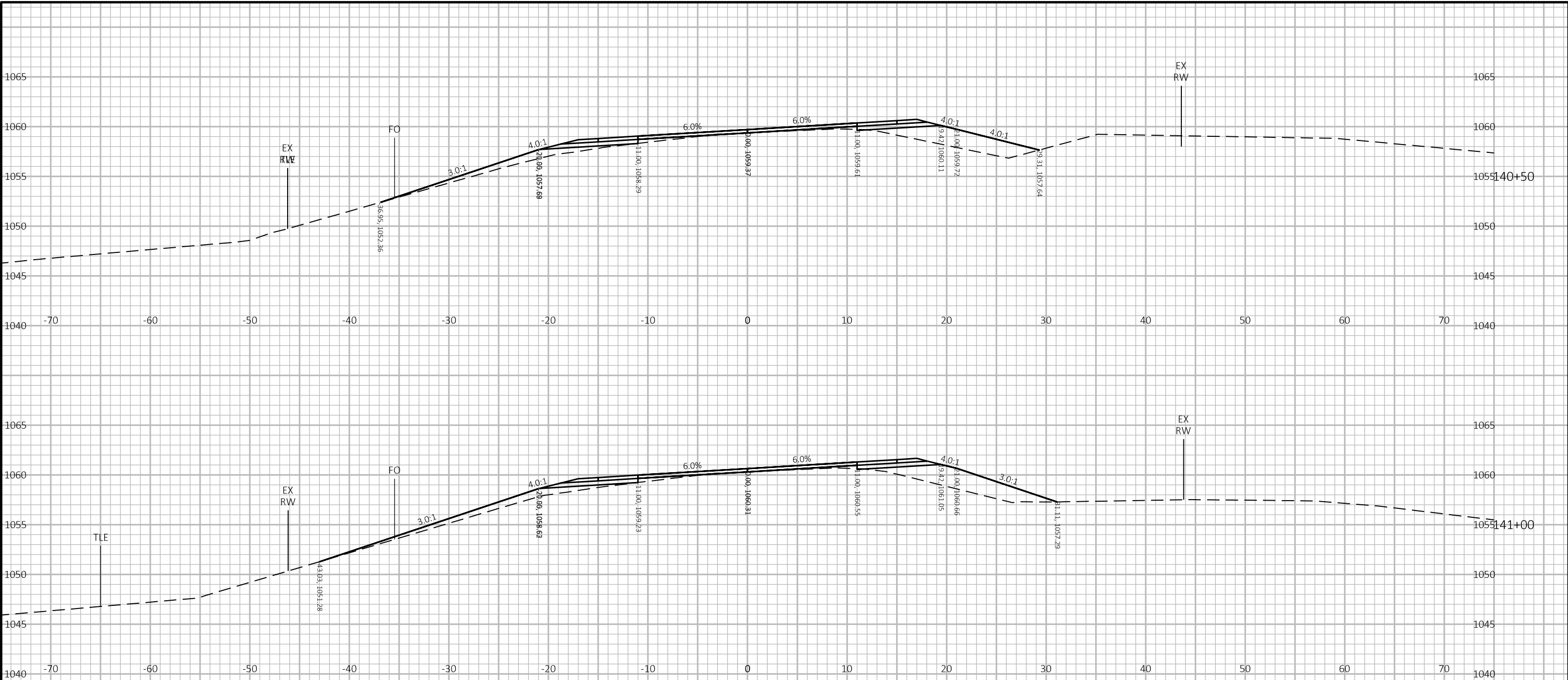
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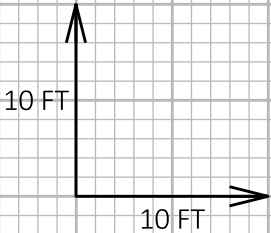
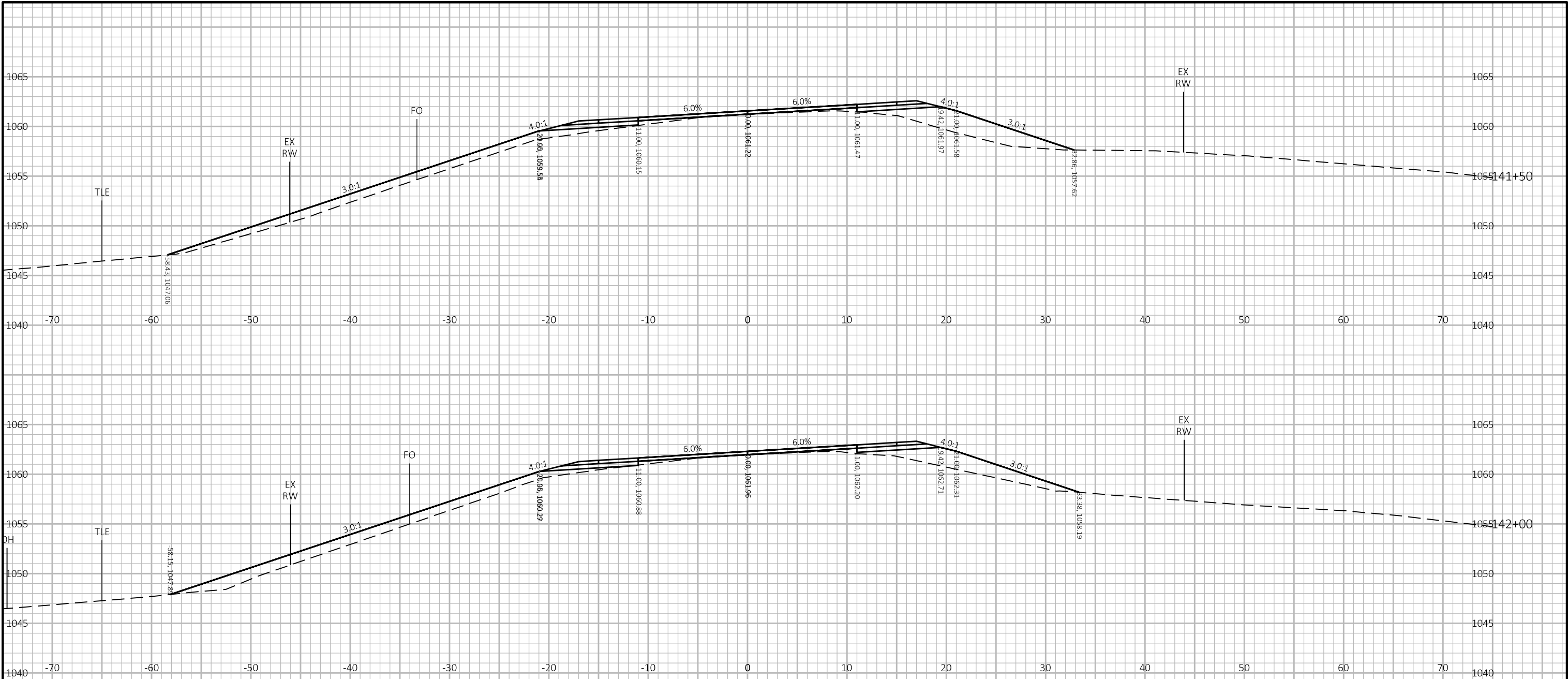






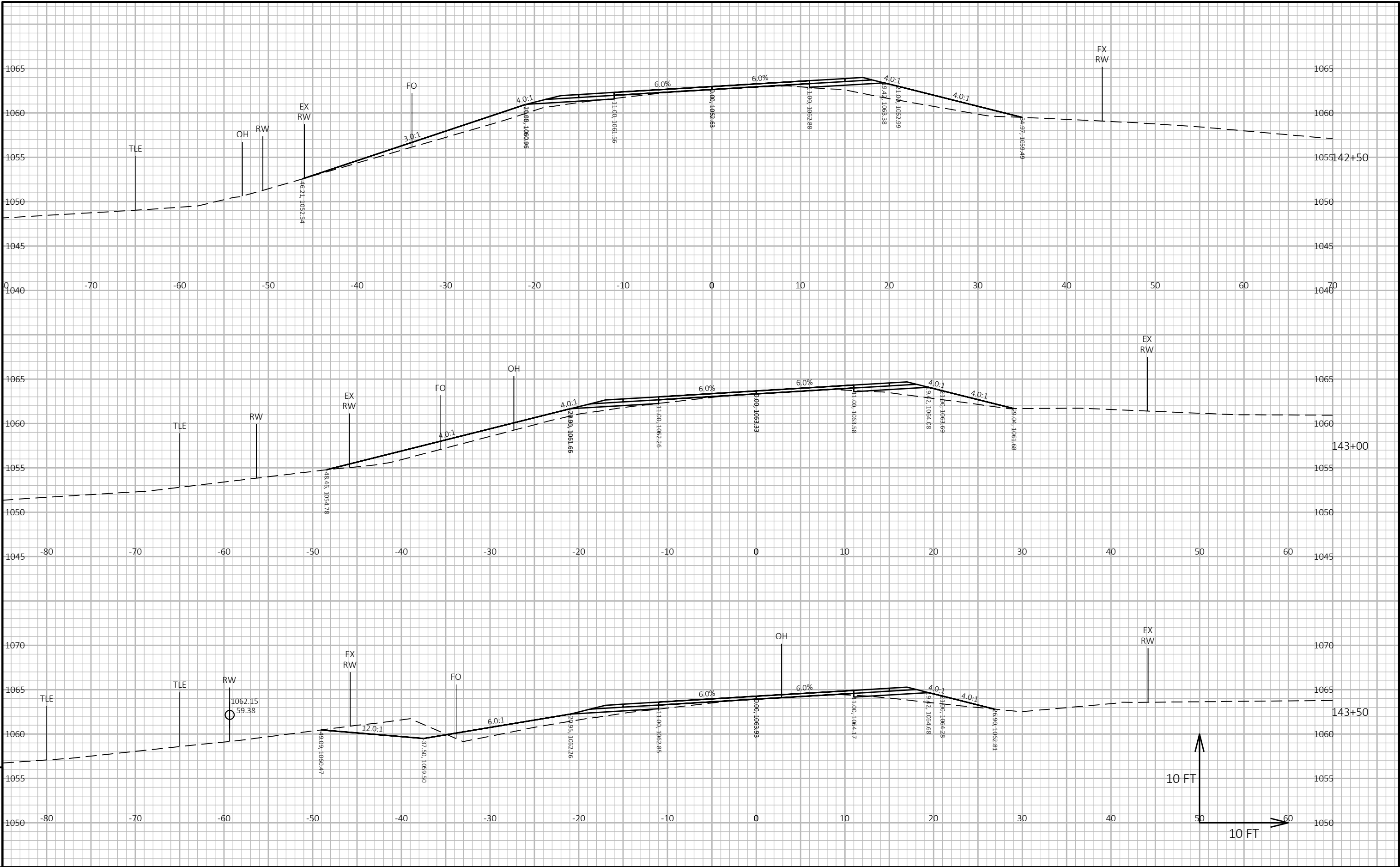
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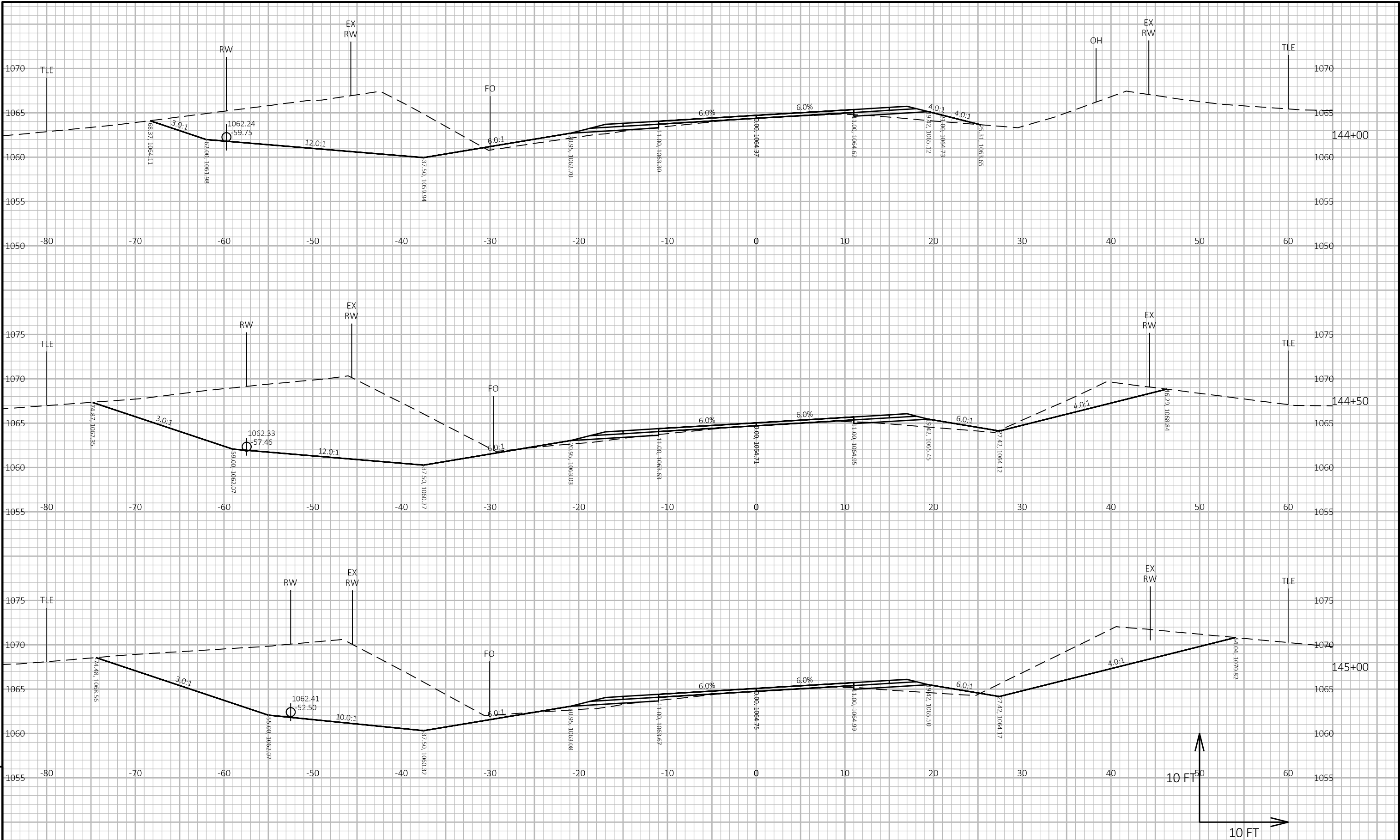
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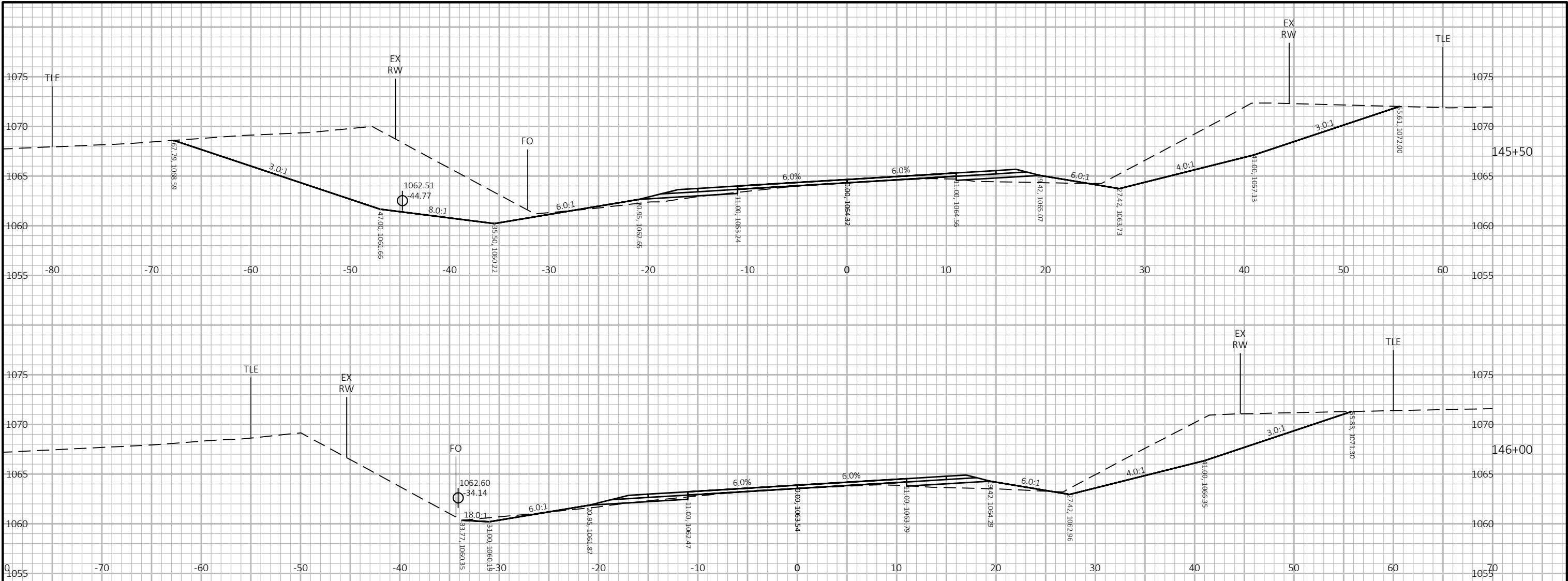


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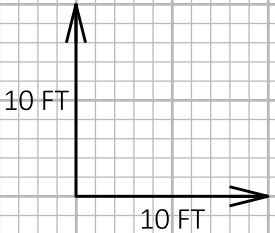
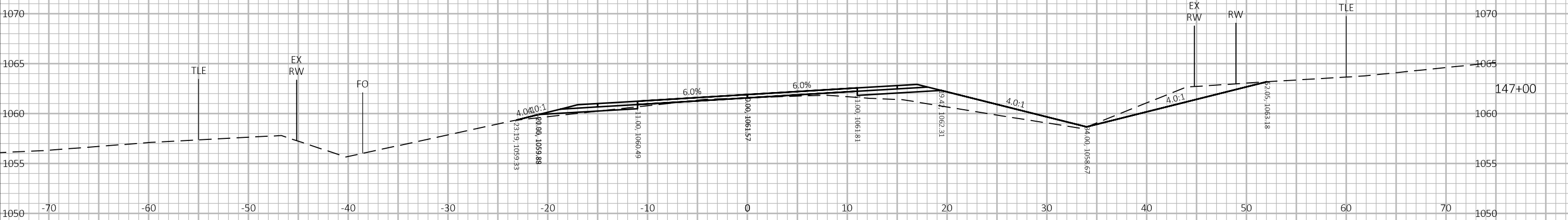
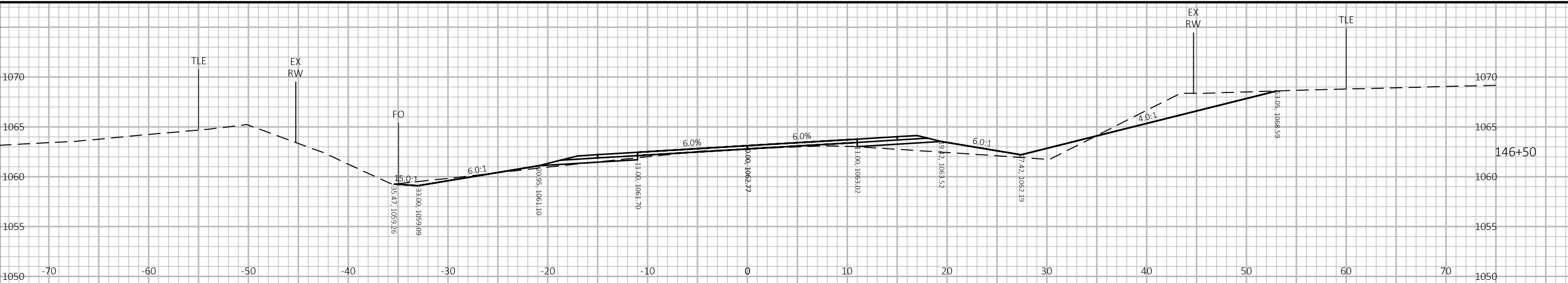






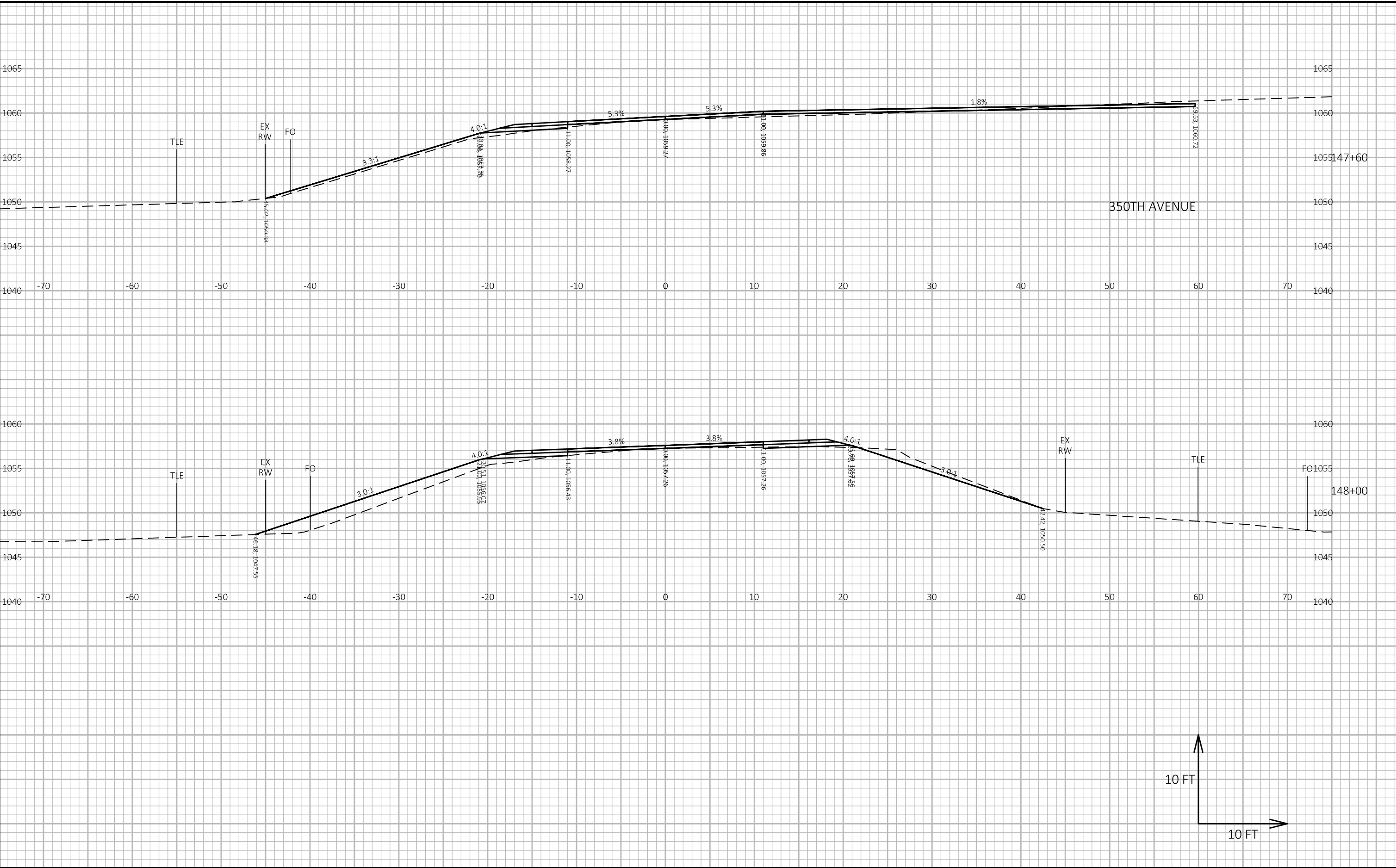
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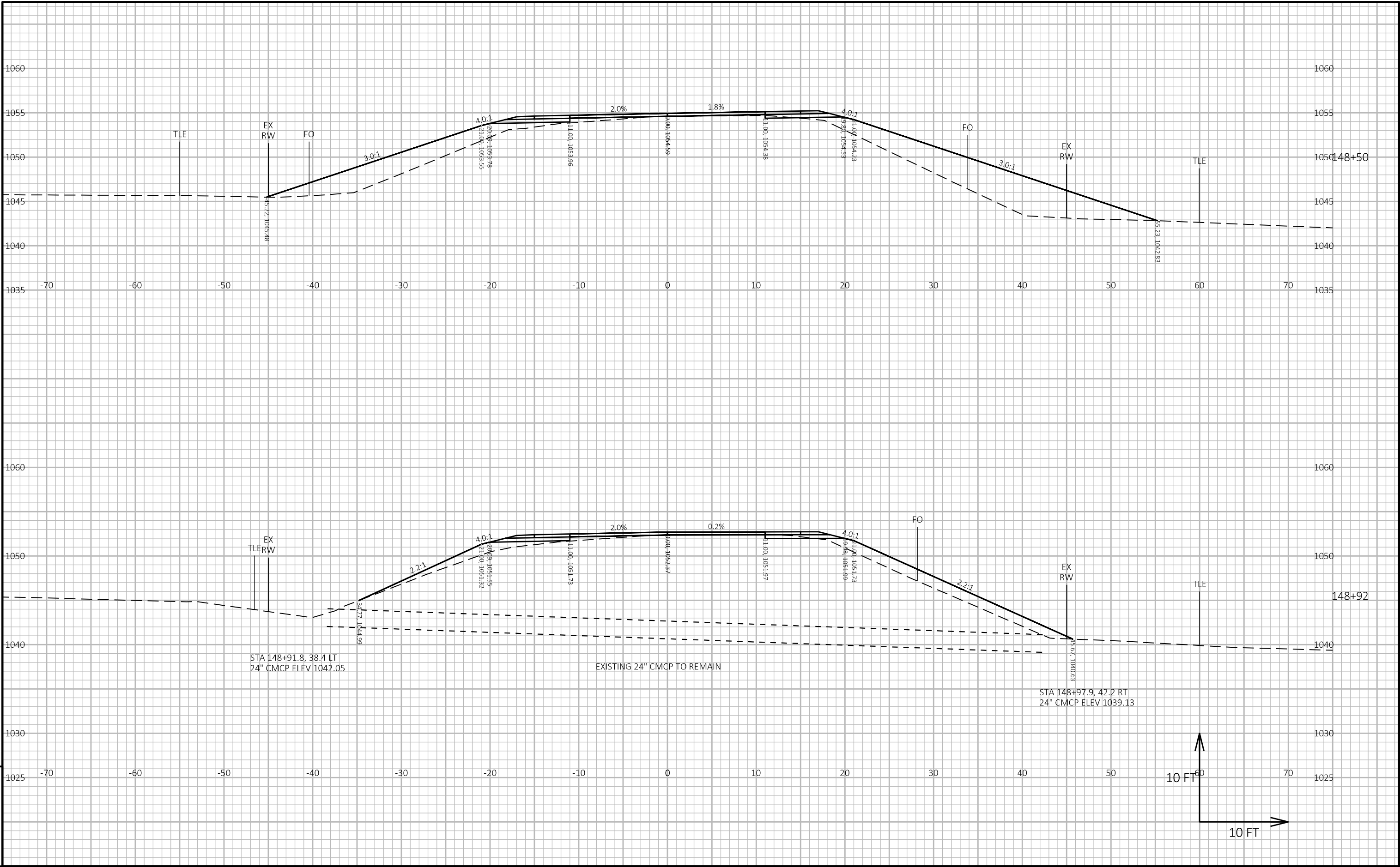
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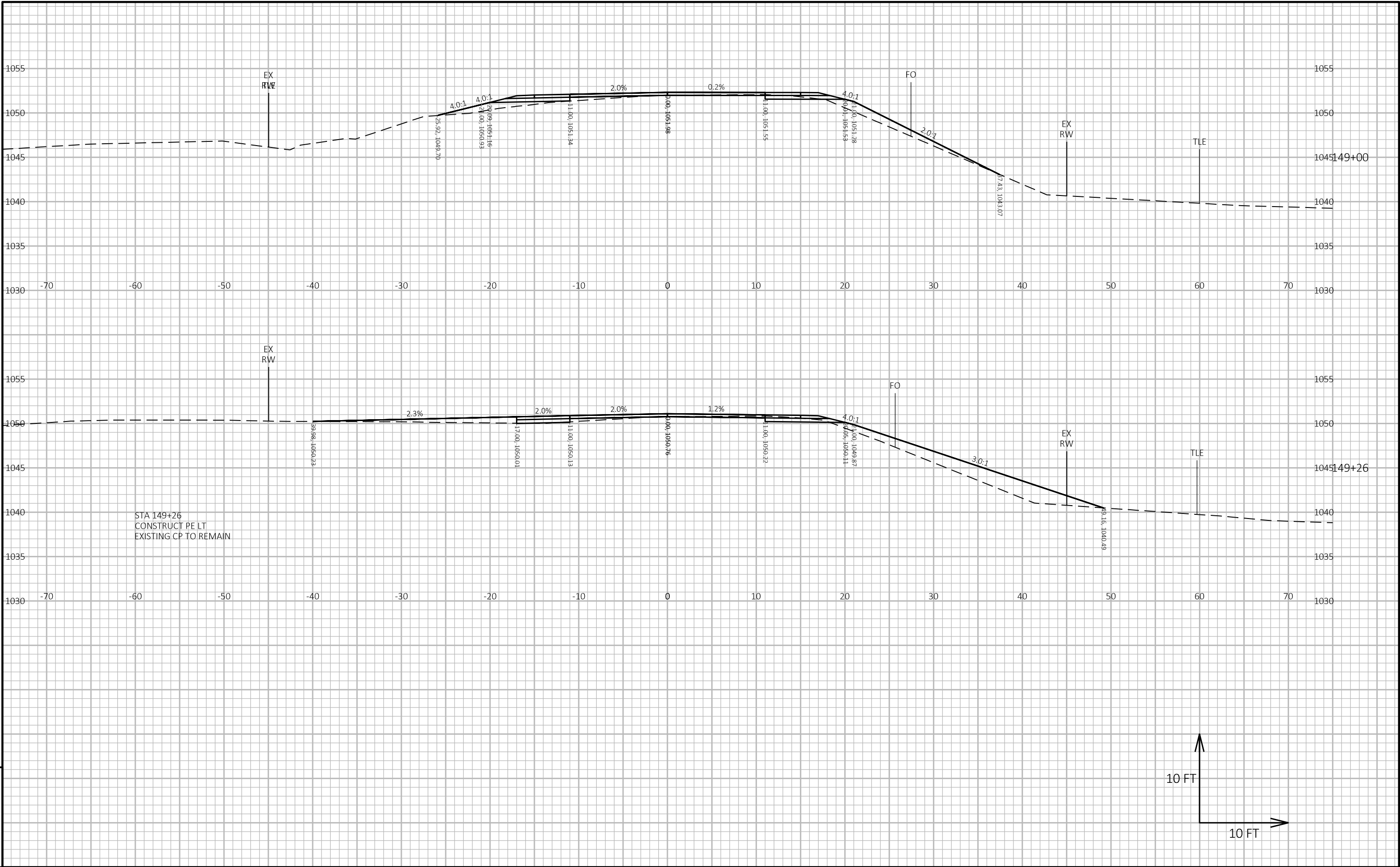
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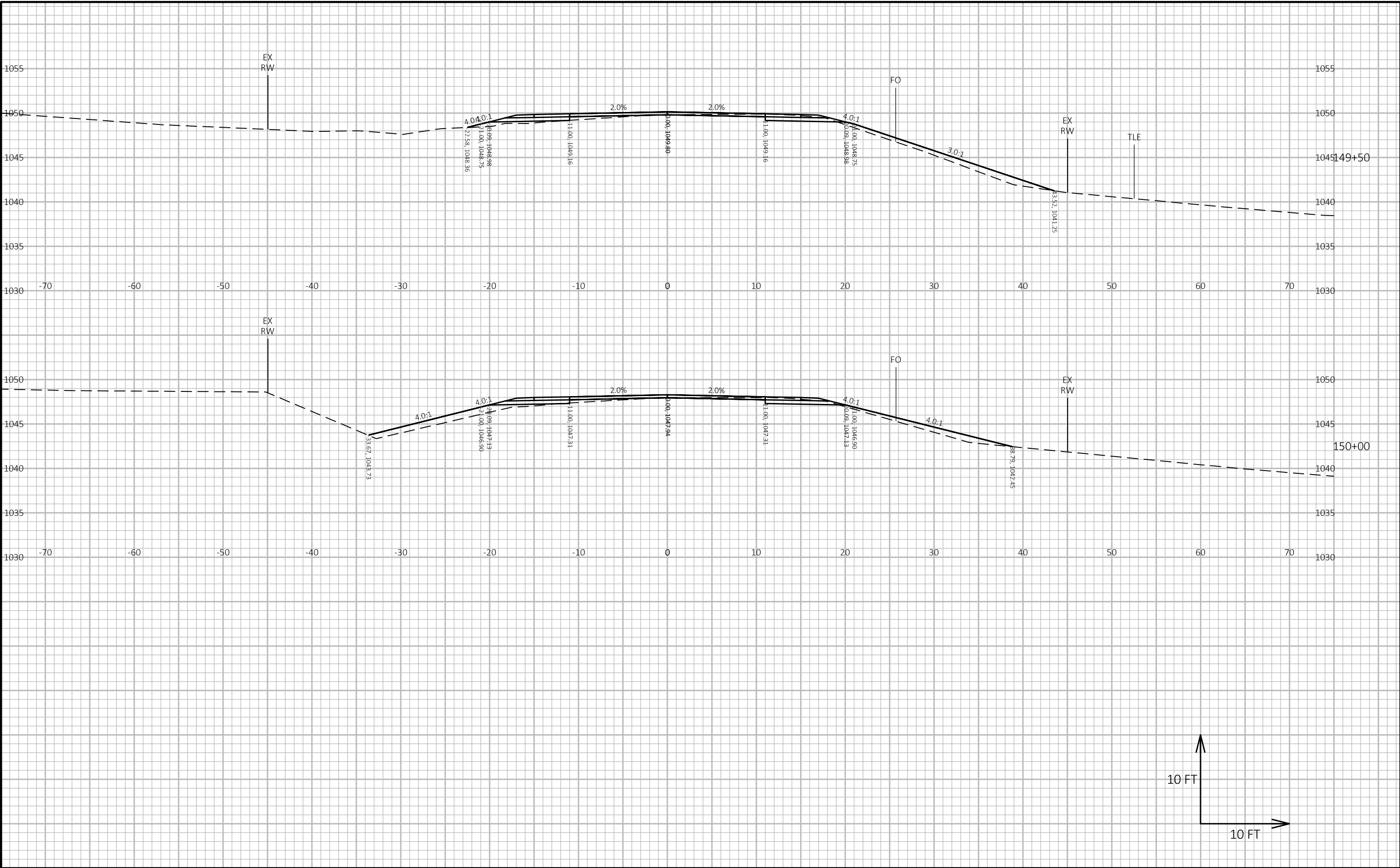
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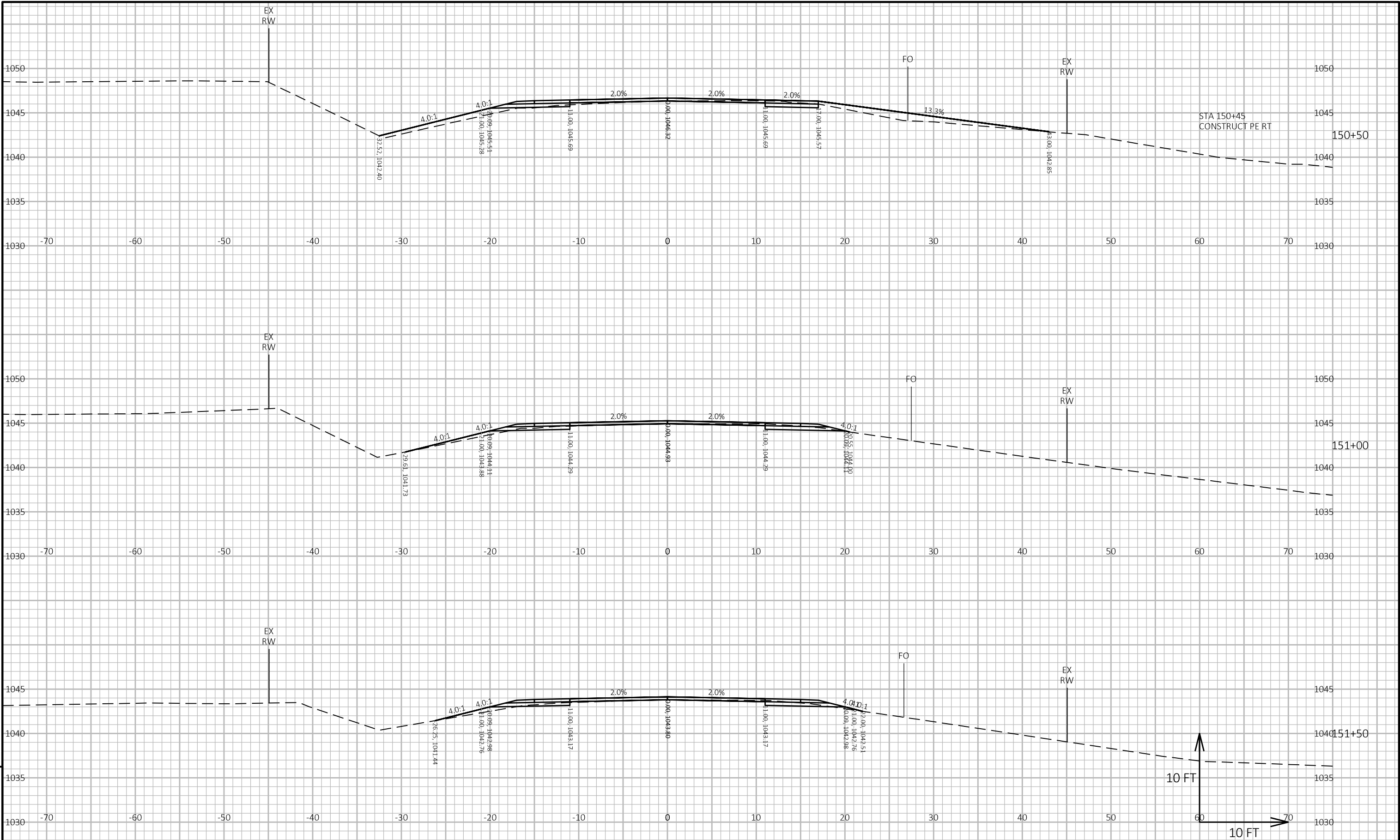


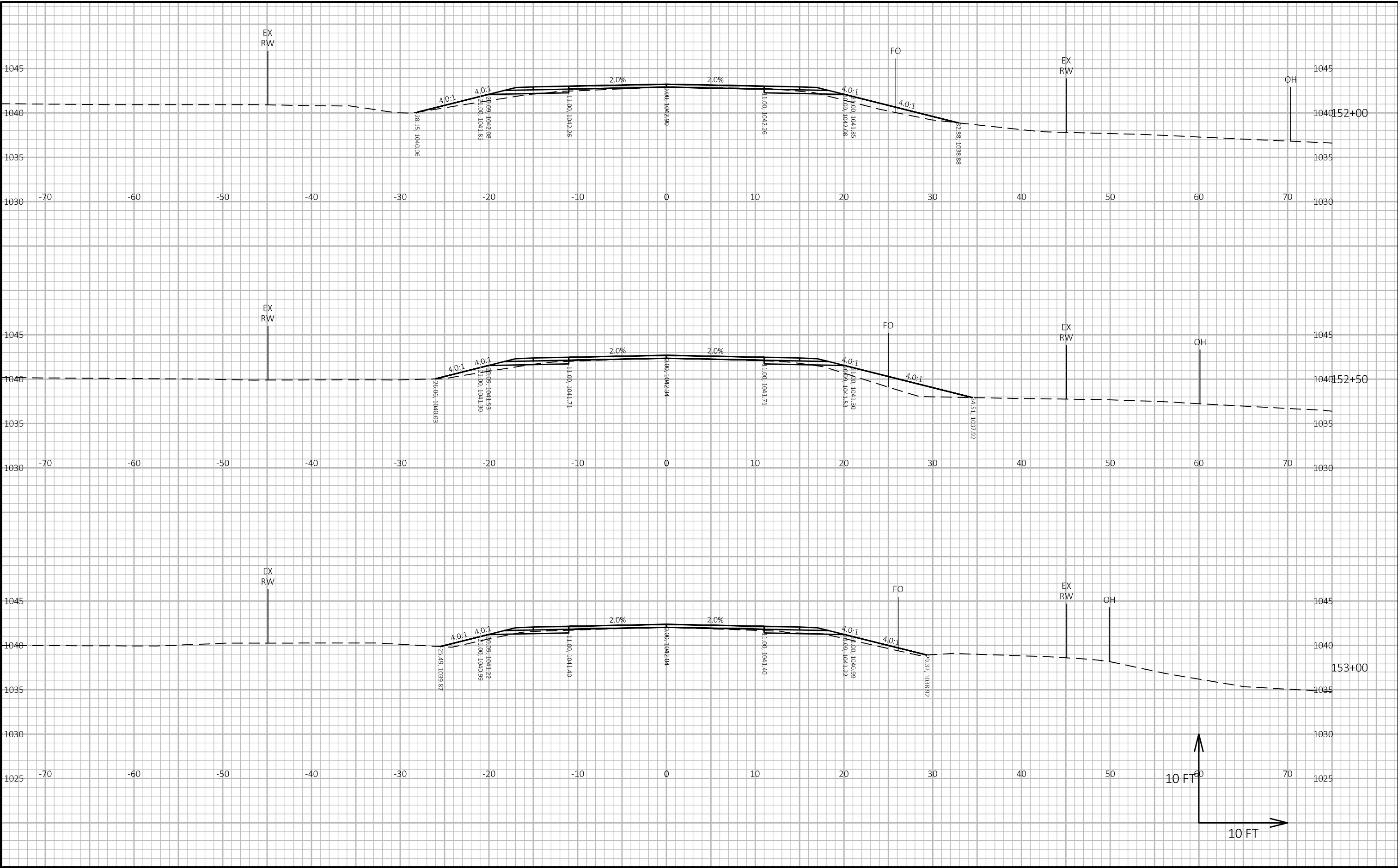


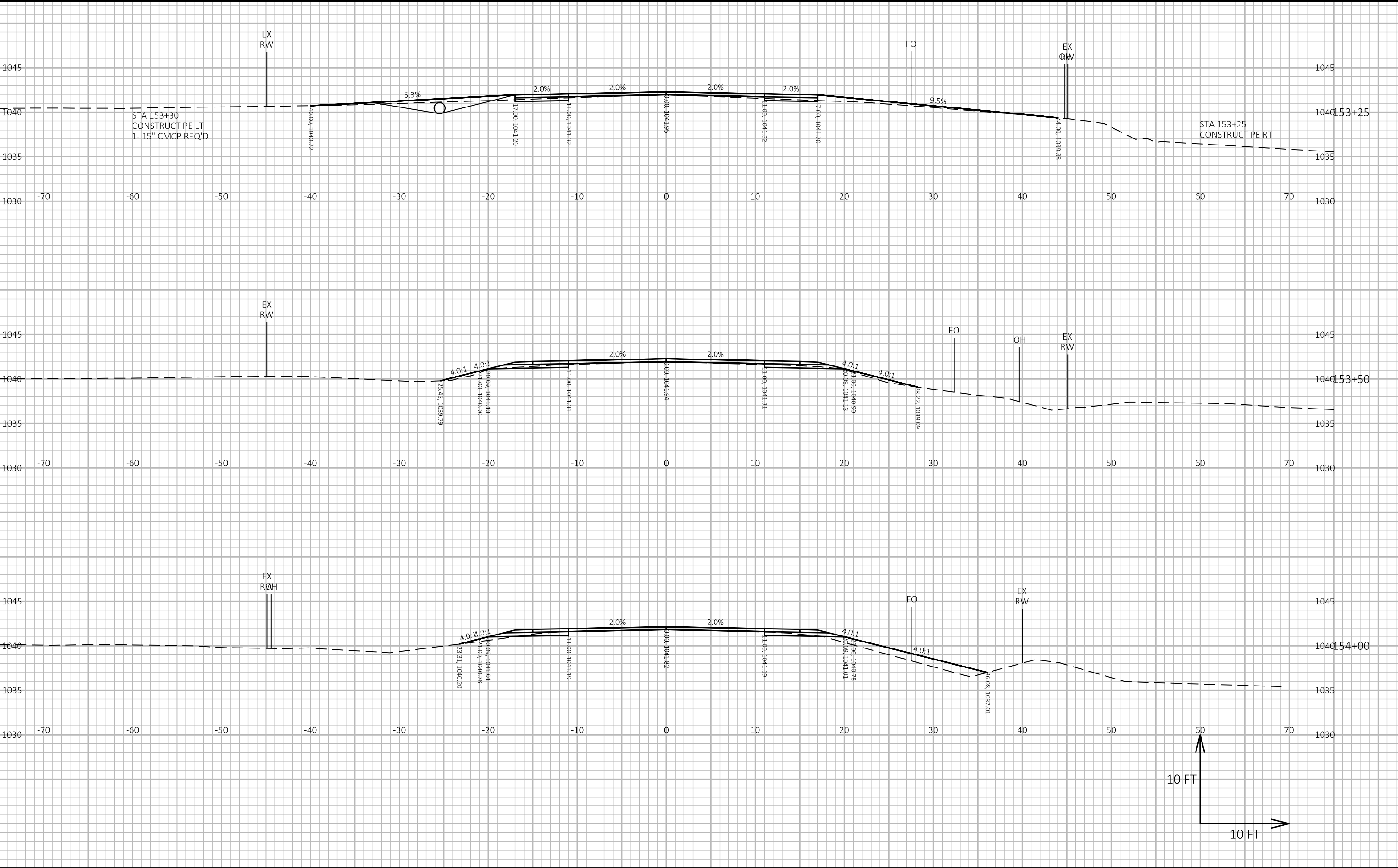
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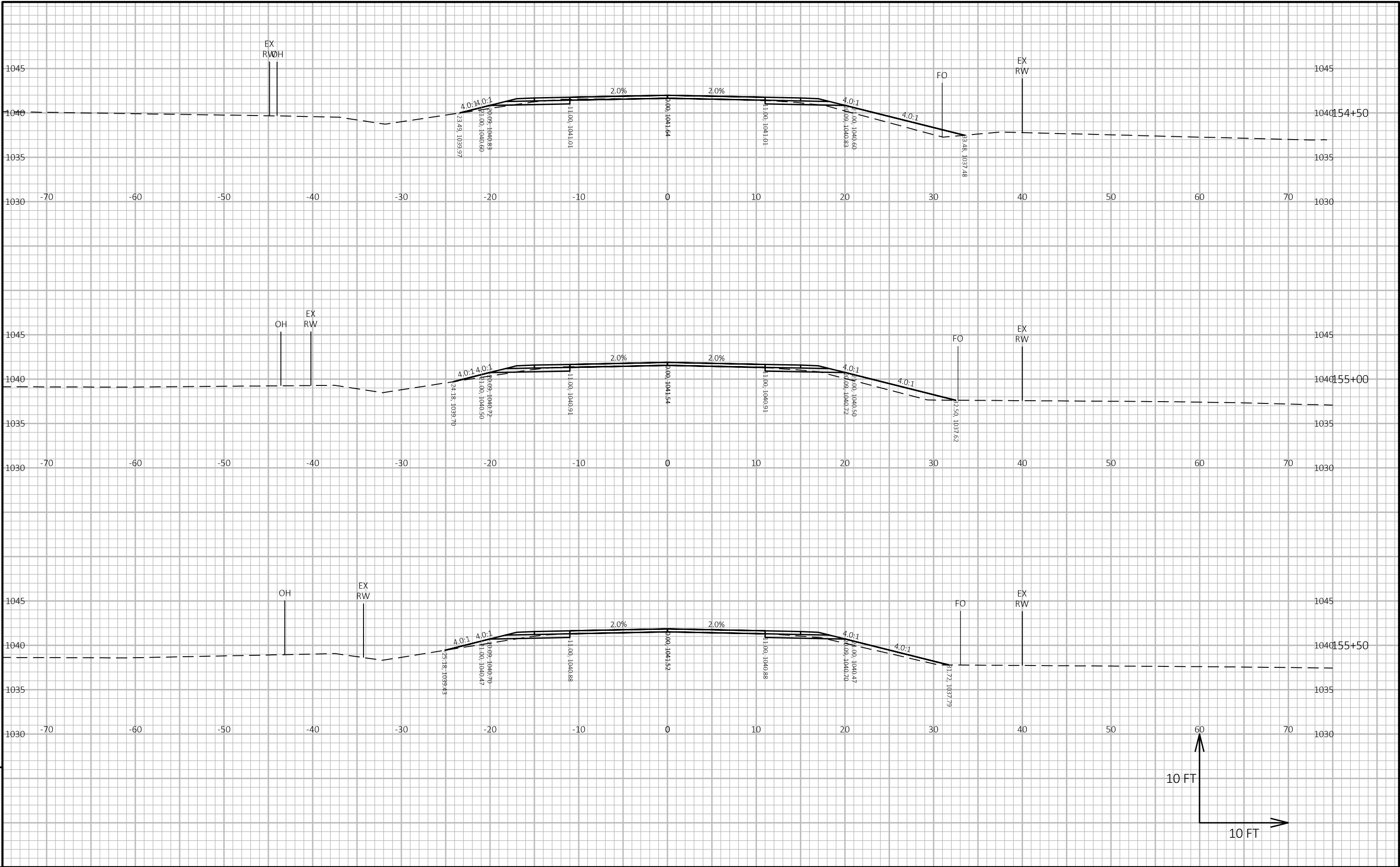
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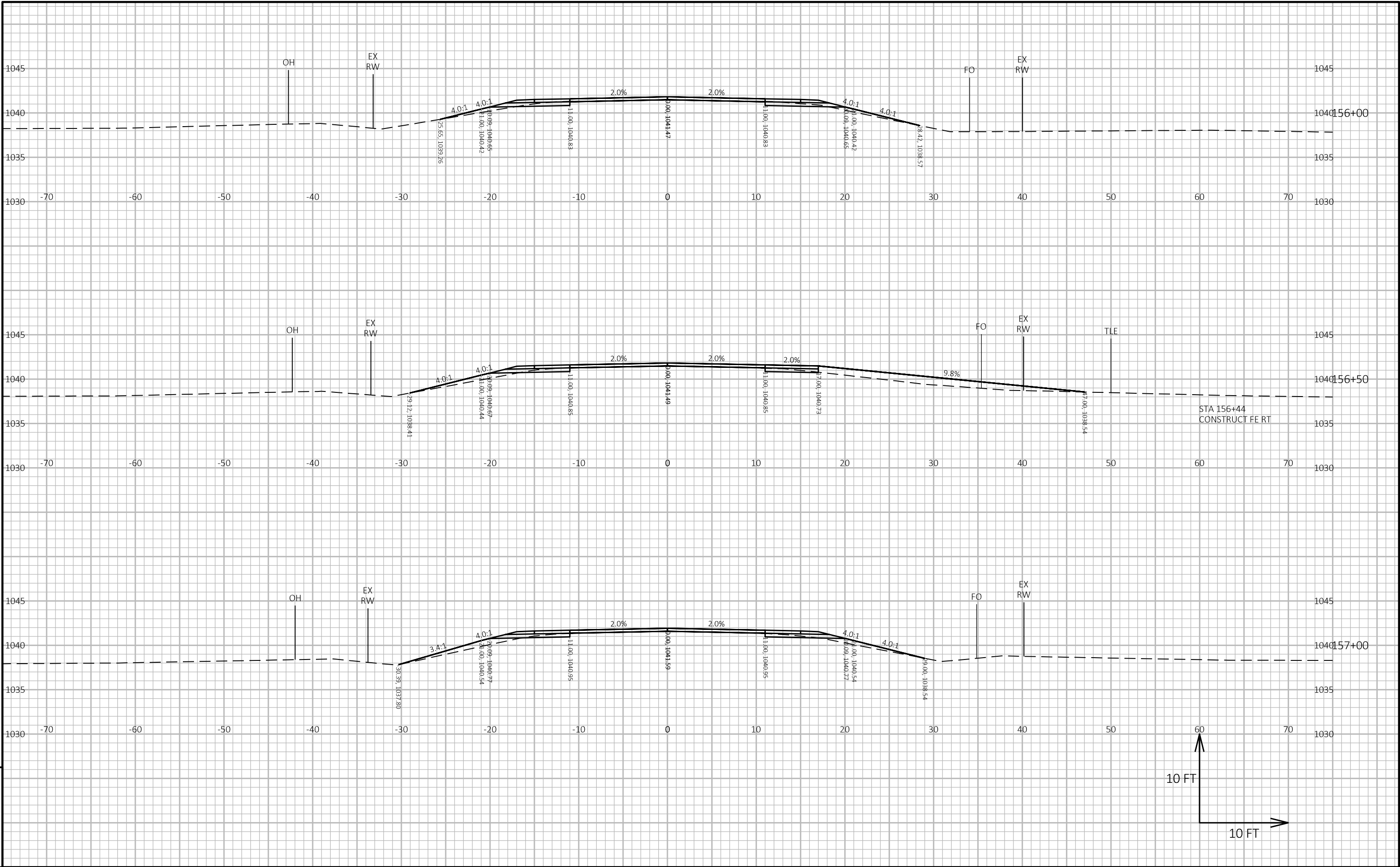


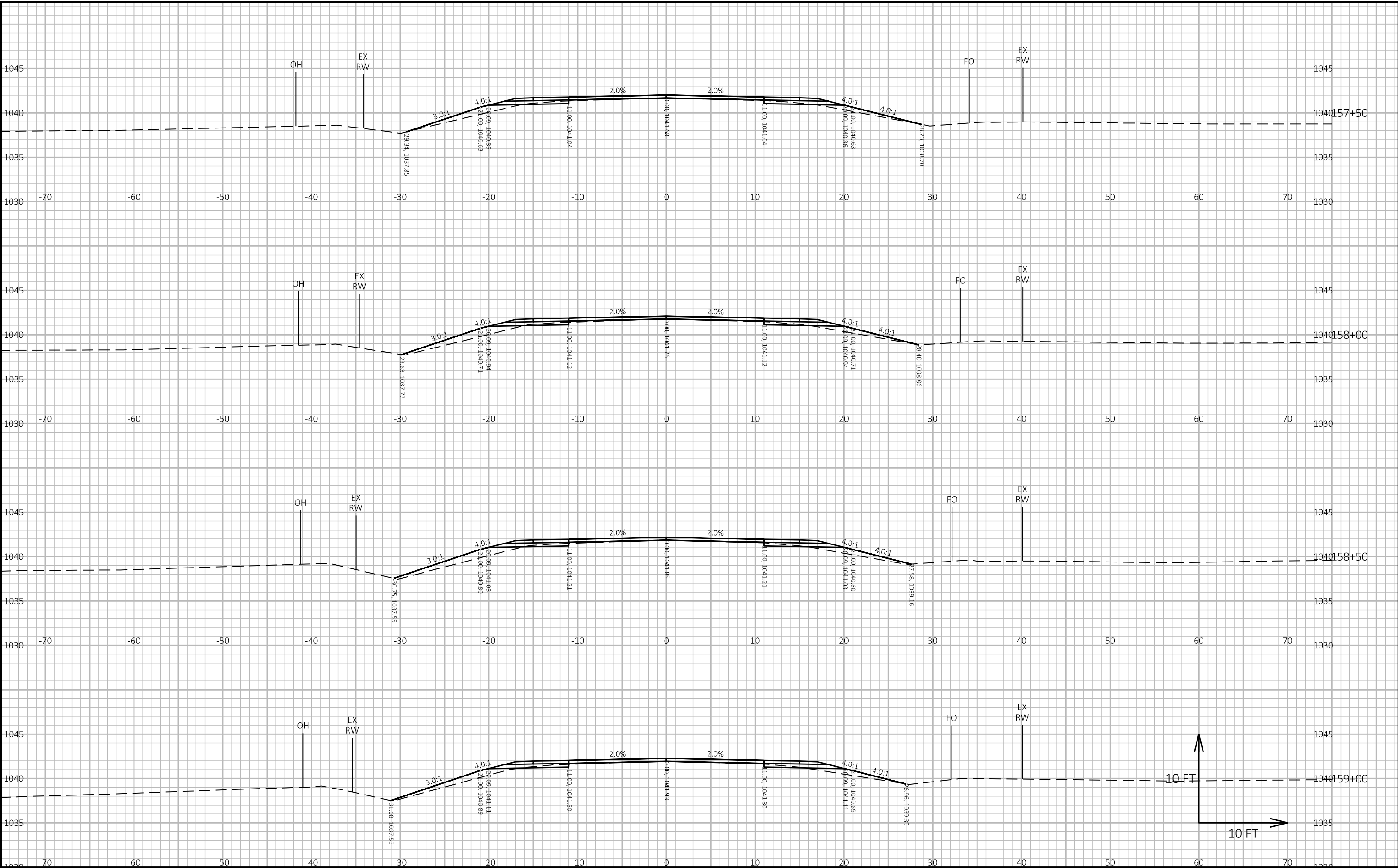


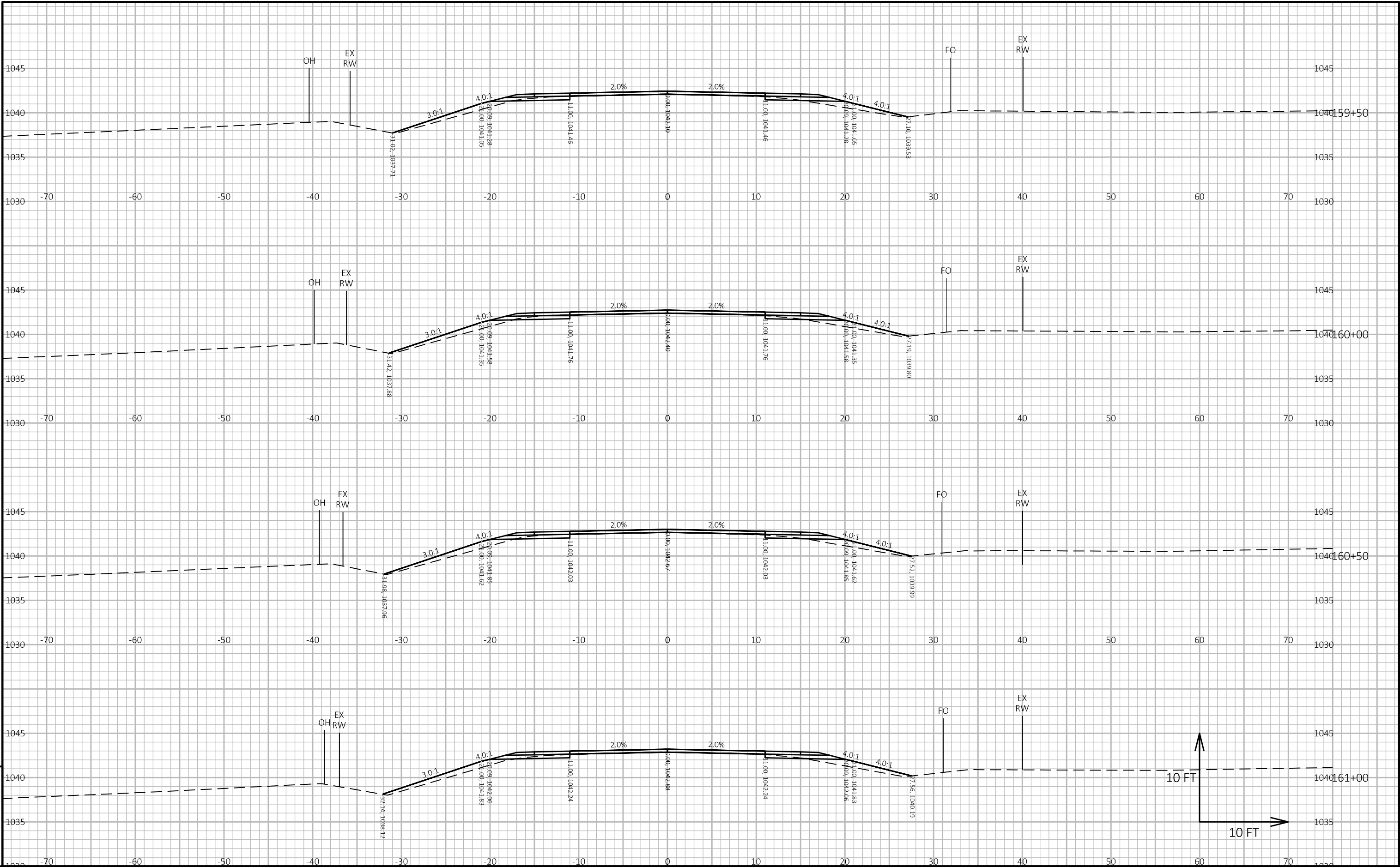


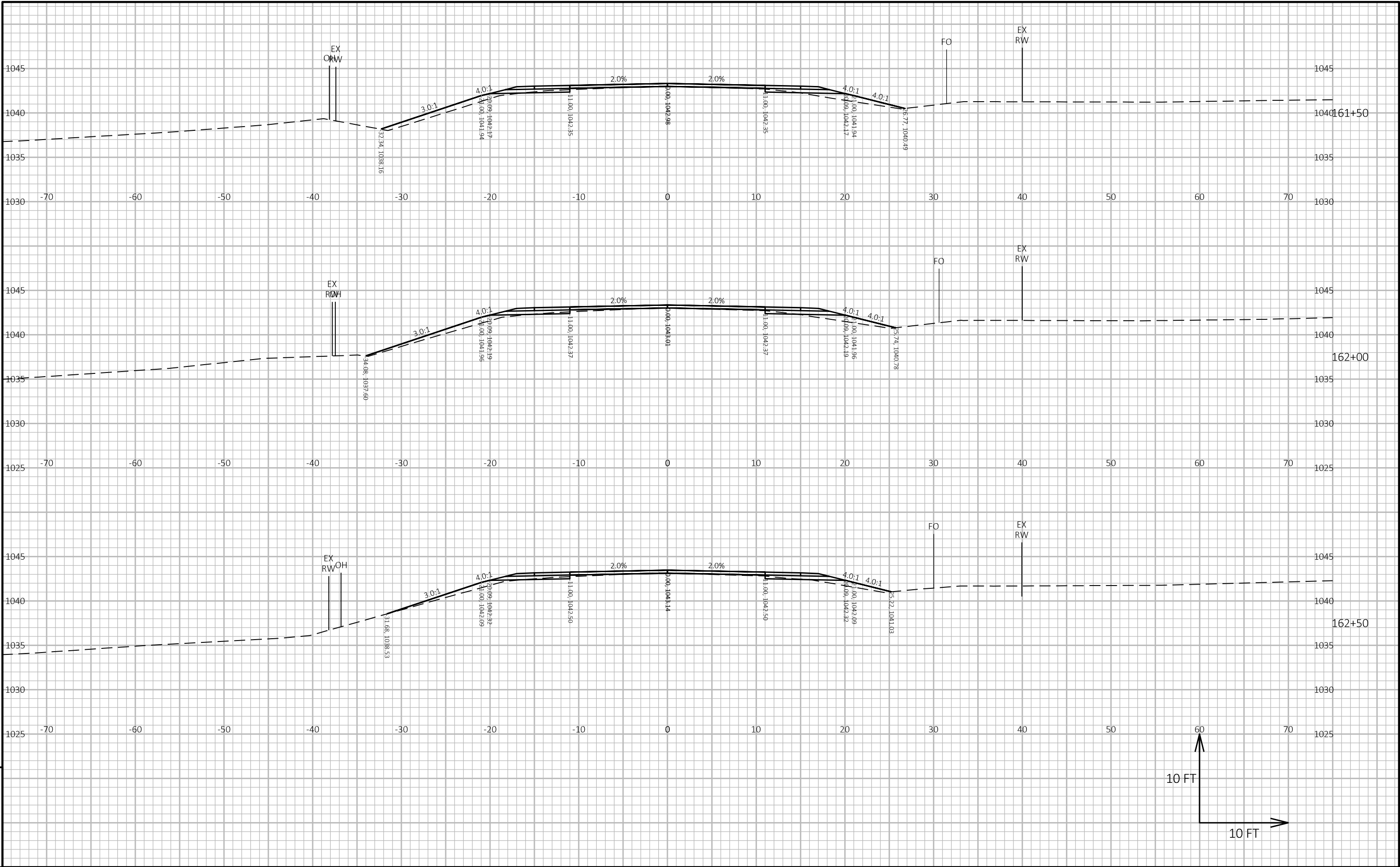
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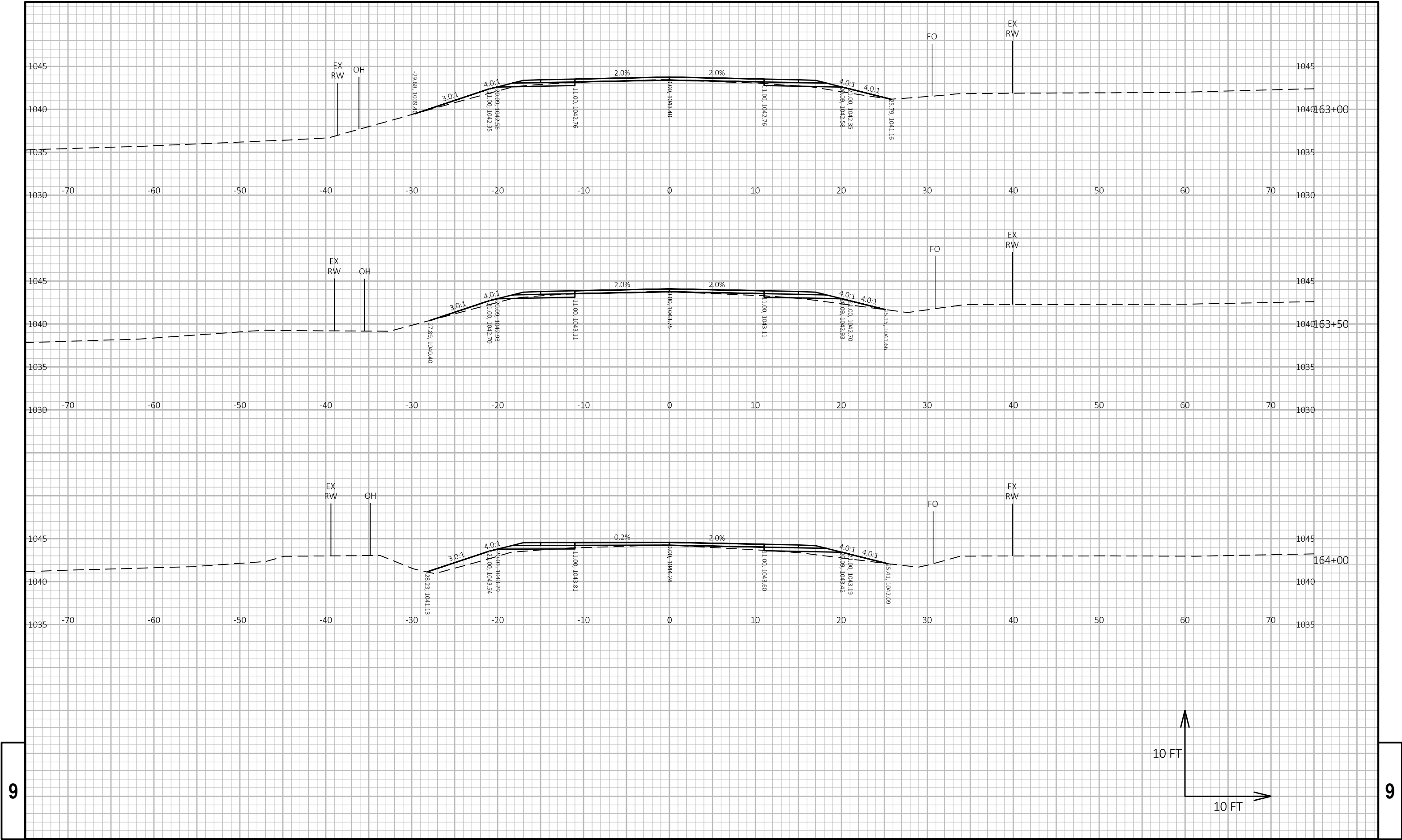






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PROJECT NO: 7881-05-73

HWY: CTH D

COUNTY: DUNN

CROSS SECTIONS: CTH D

SHEET 158

E

FILE NAME : I:\41\410859 DUNN CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR-CTH D 4-INCH RAISE.DWG
LAYOUT NAME - 947

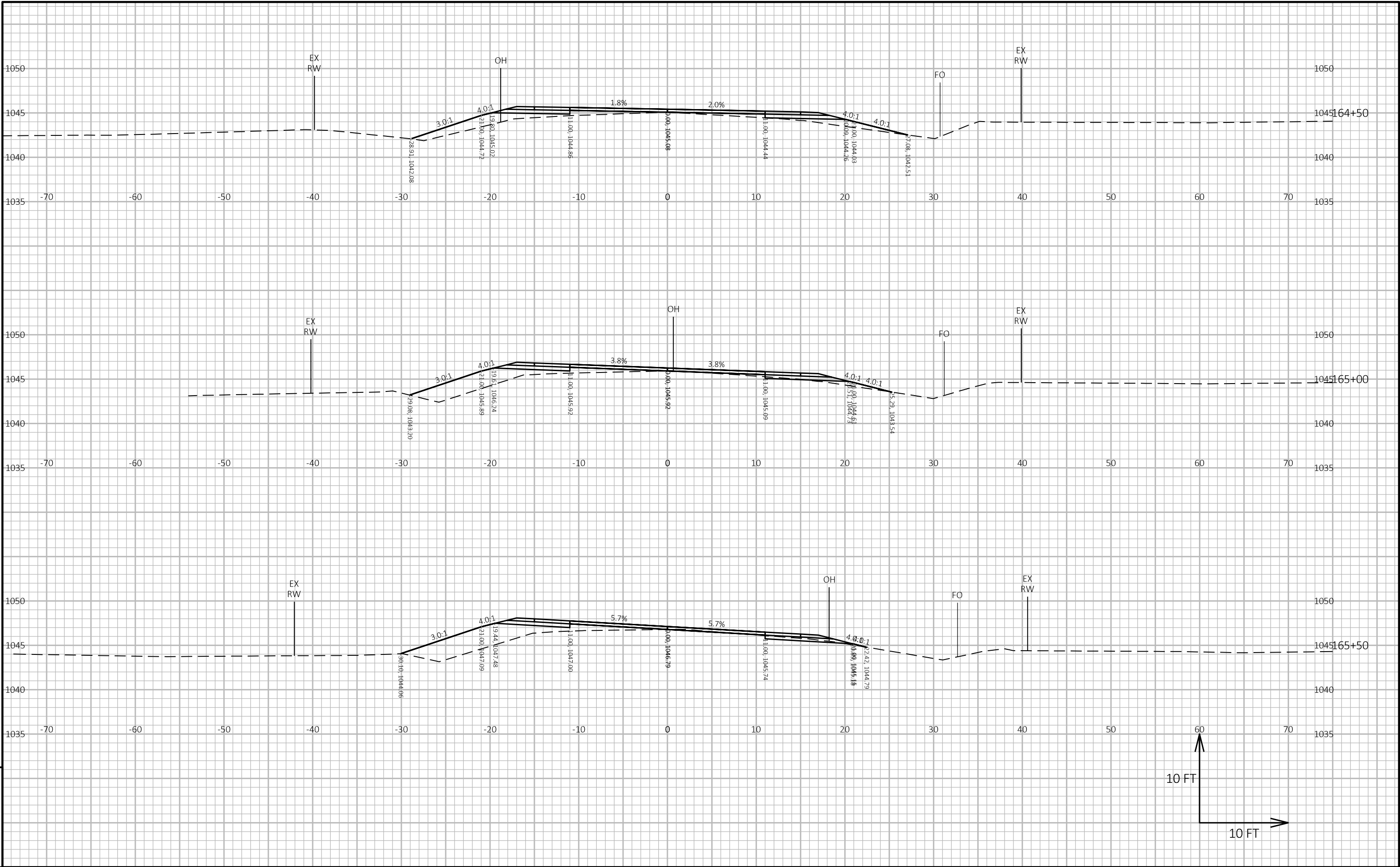
PLOT DATE : 5/16/2024 10:26 AM

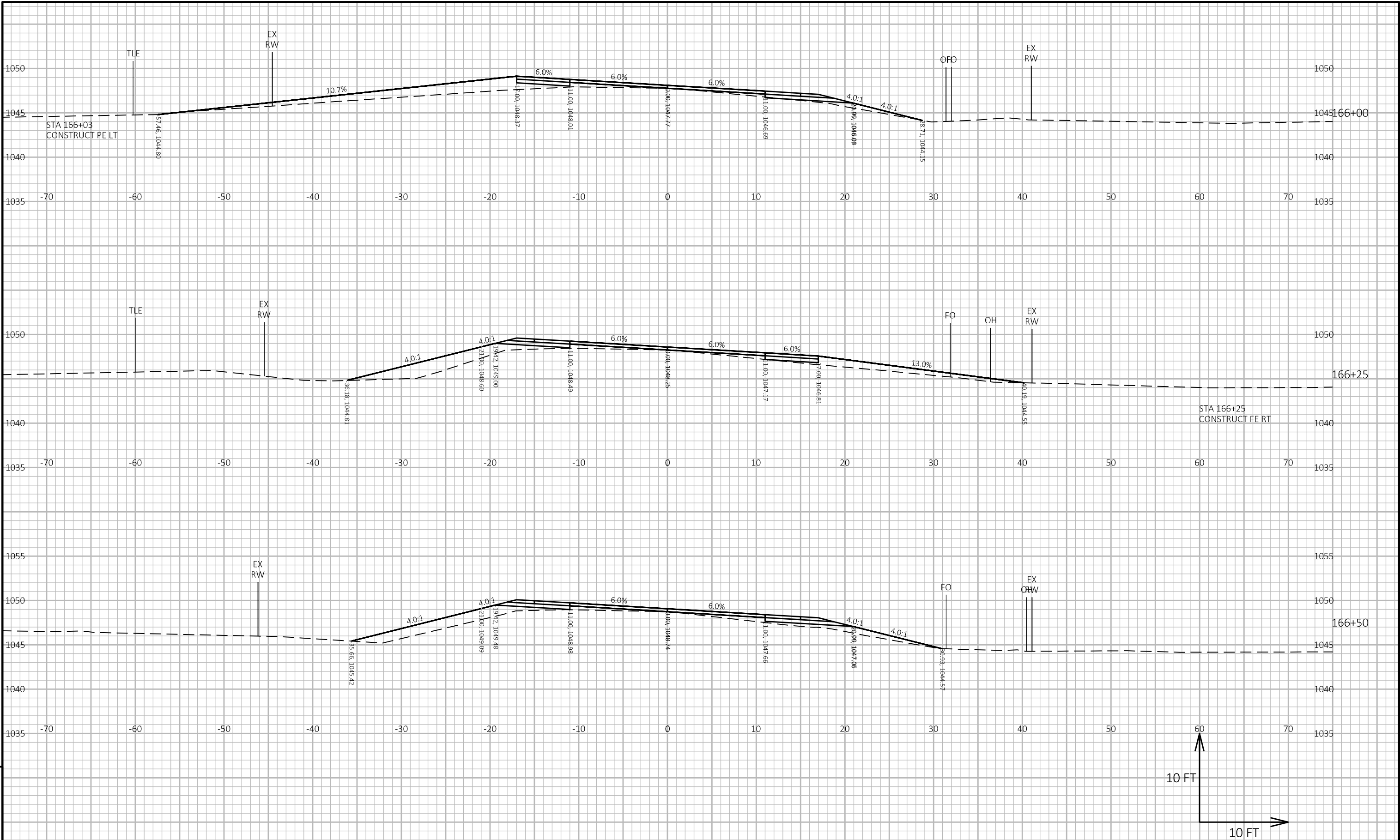
PLOT BY : HEDRINGTON, MARK

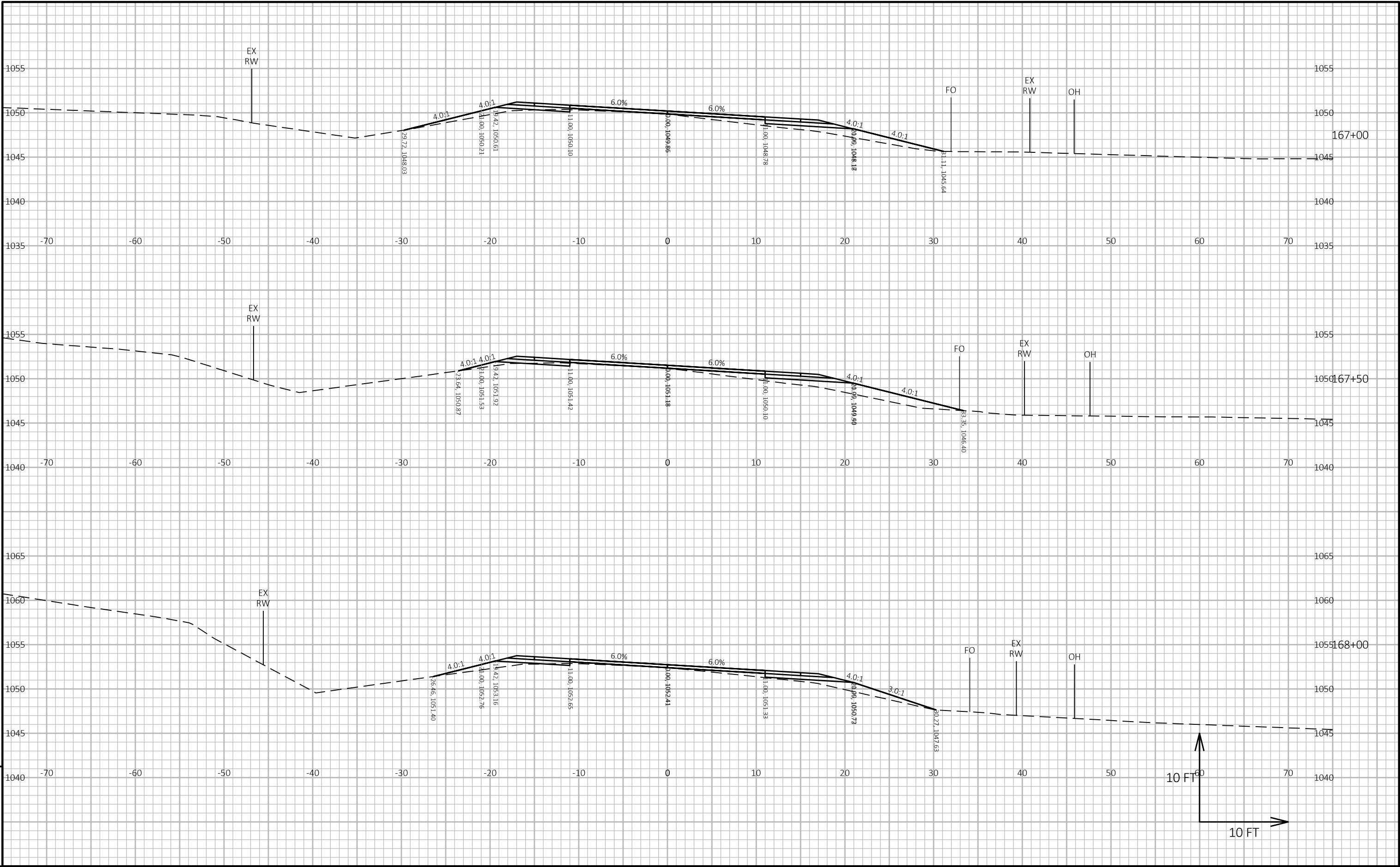
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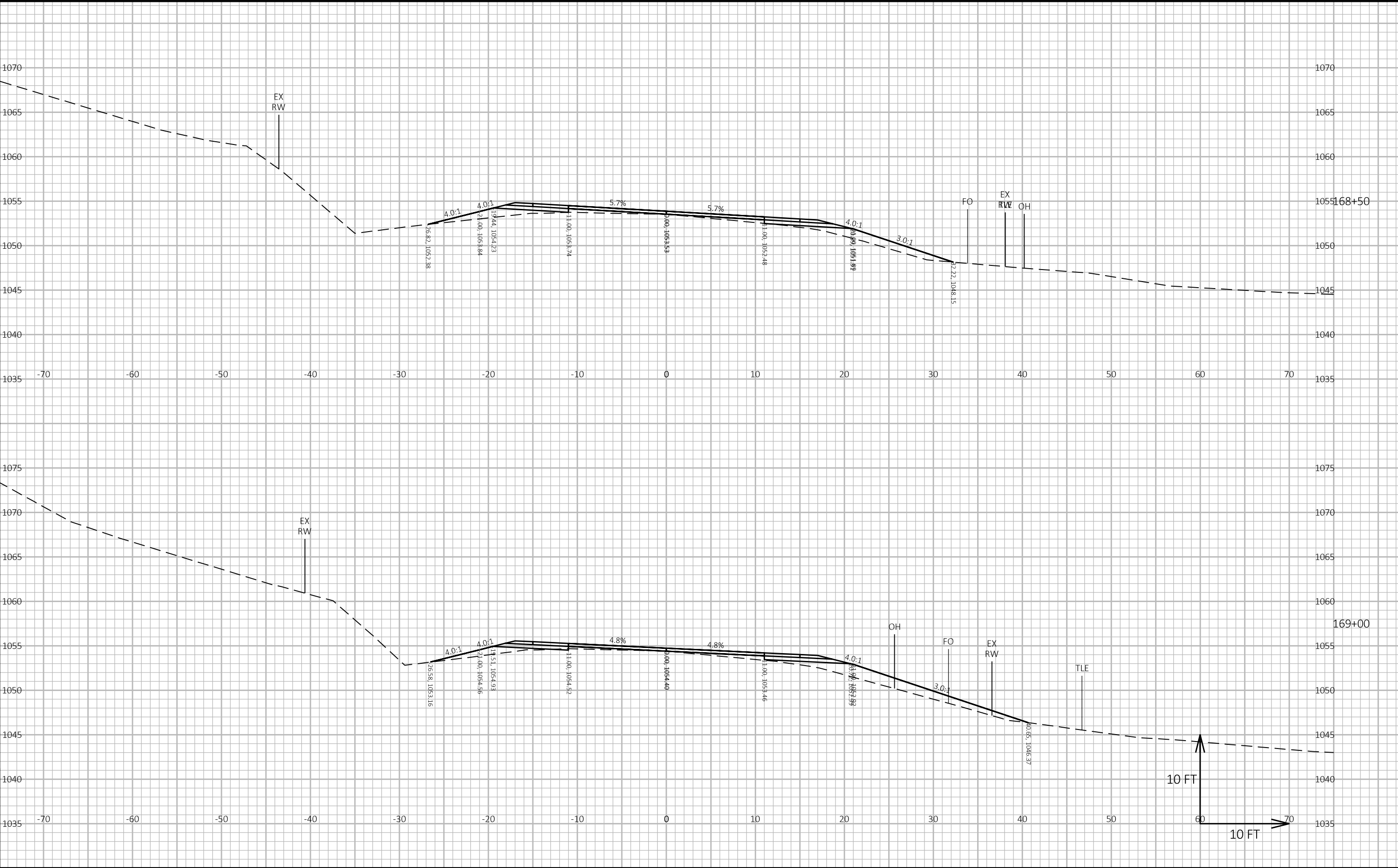
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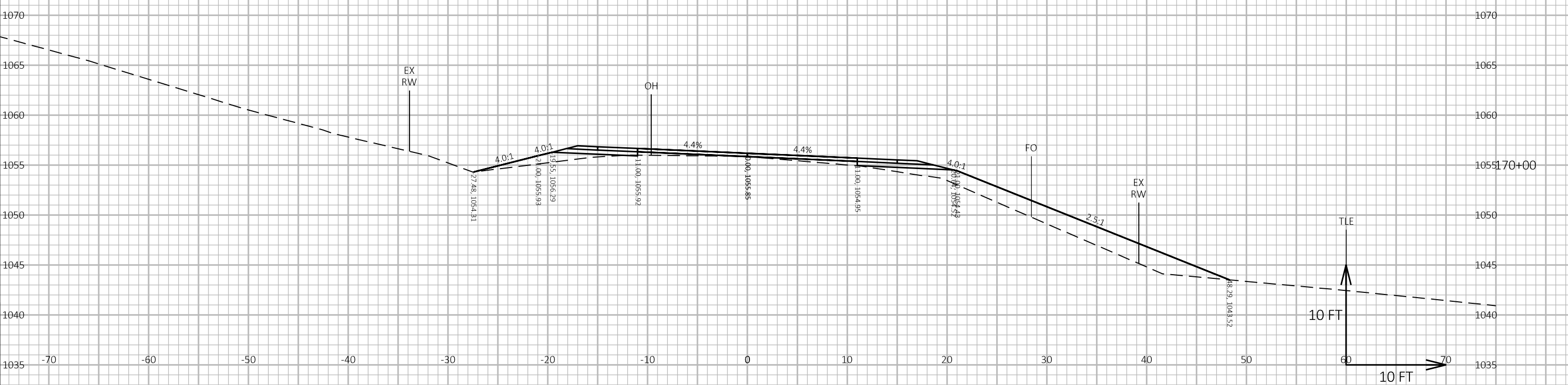
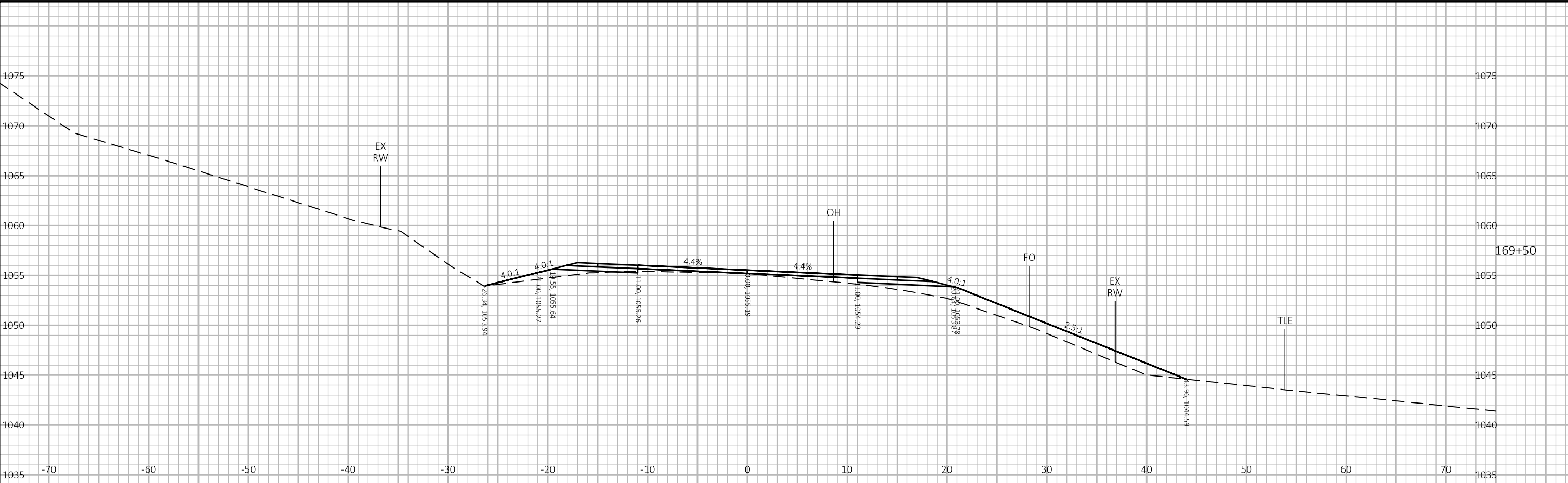
WISDOT/CADDs SHEET 49

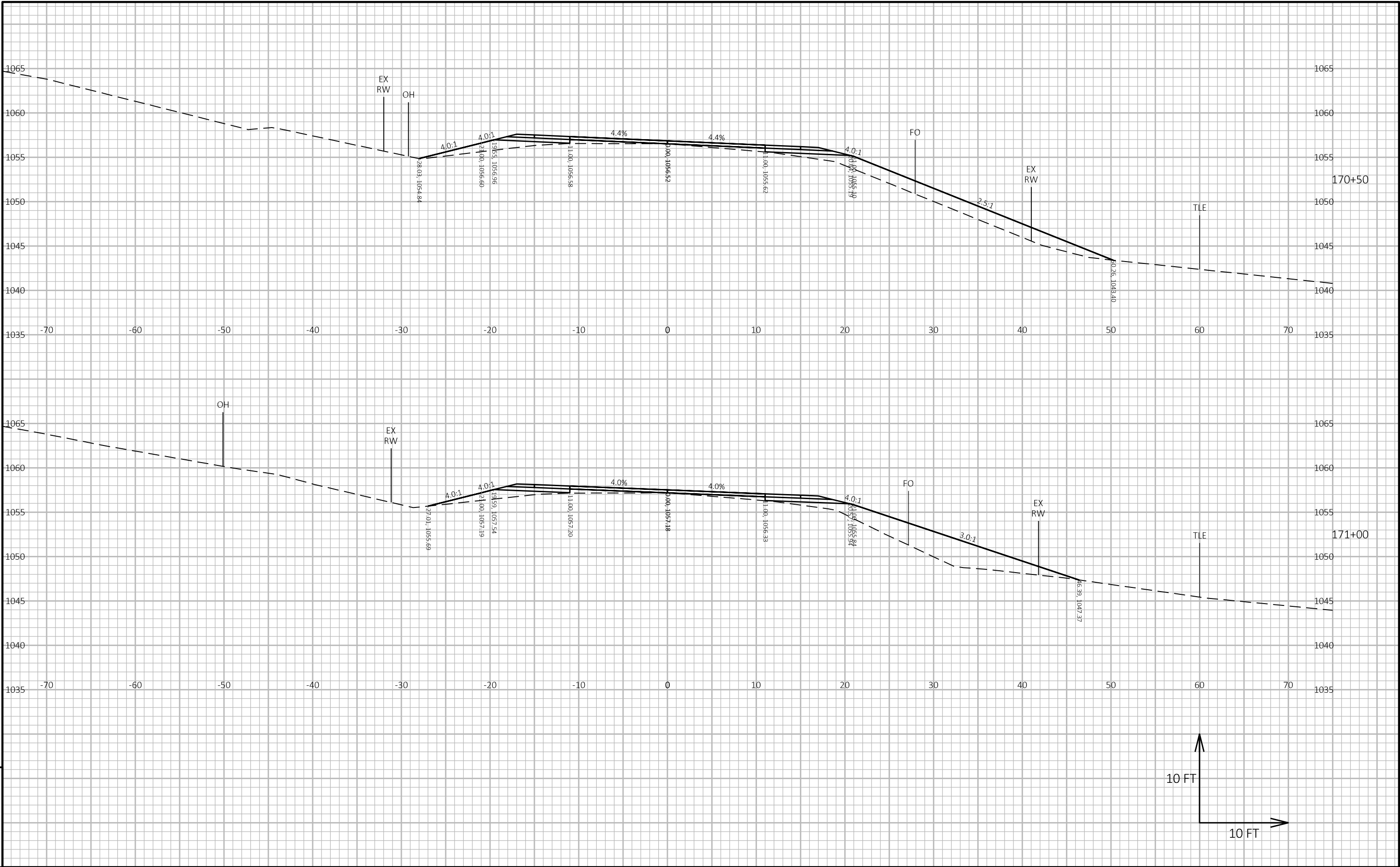






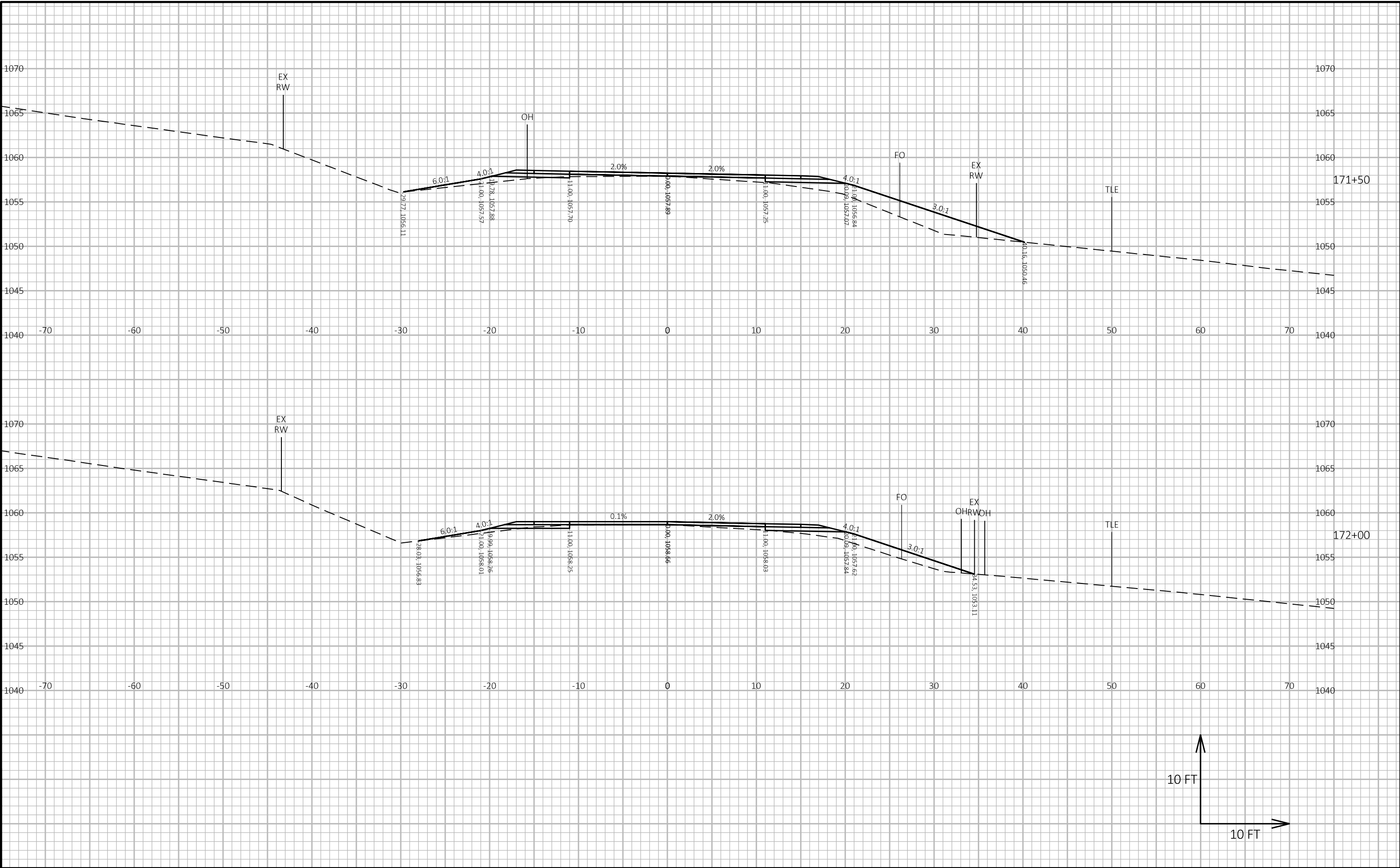


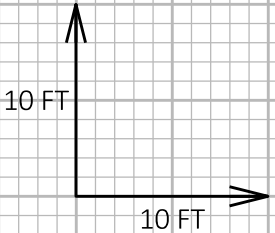
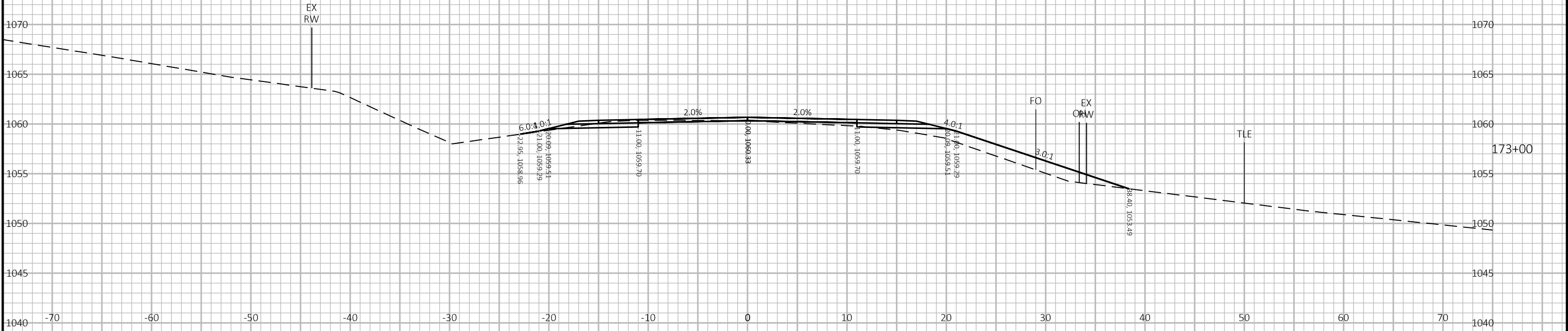
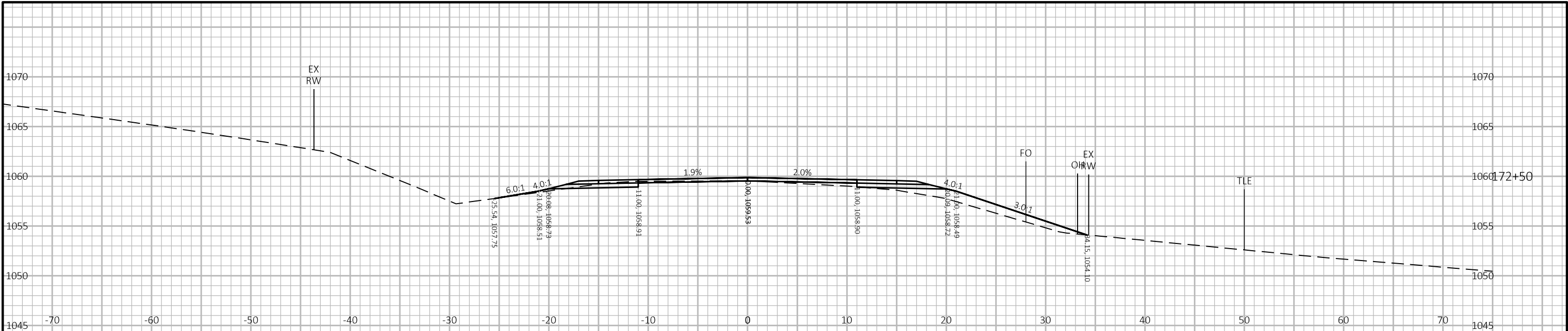


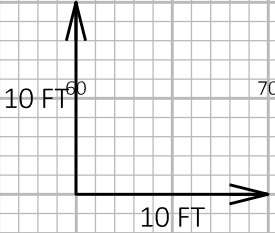
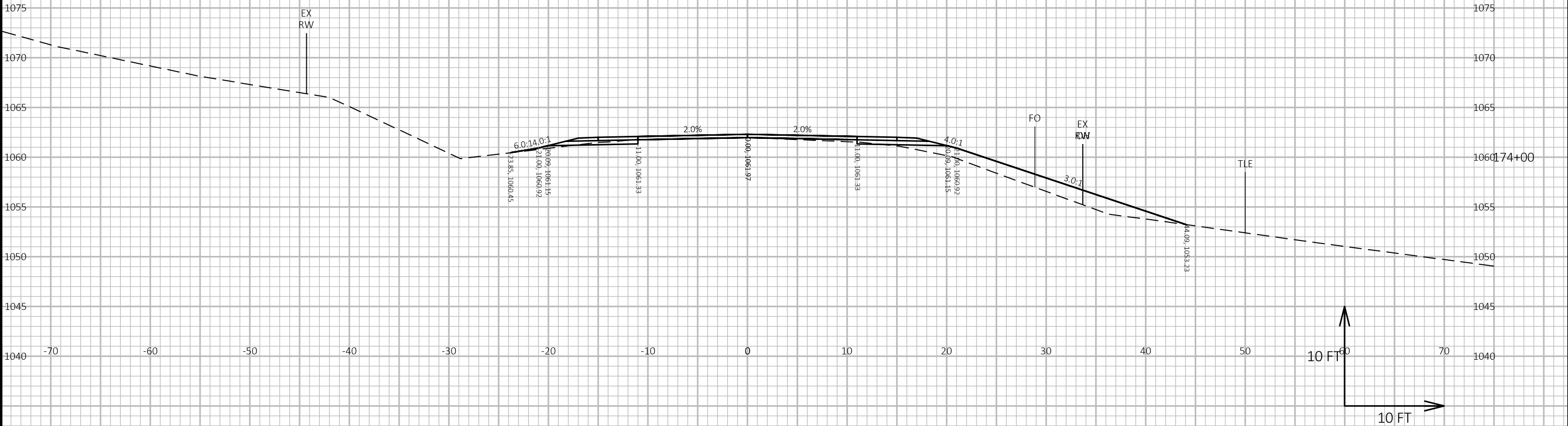
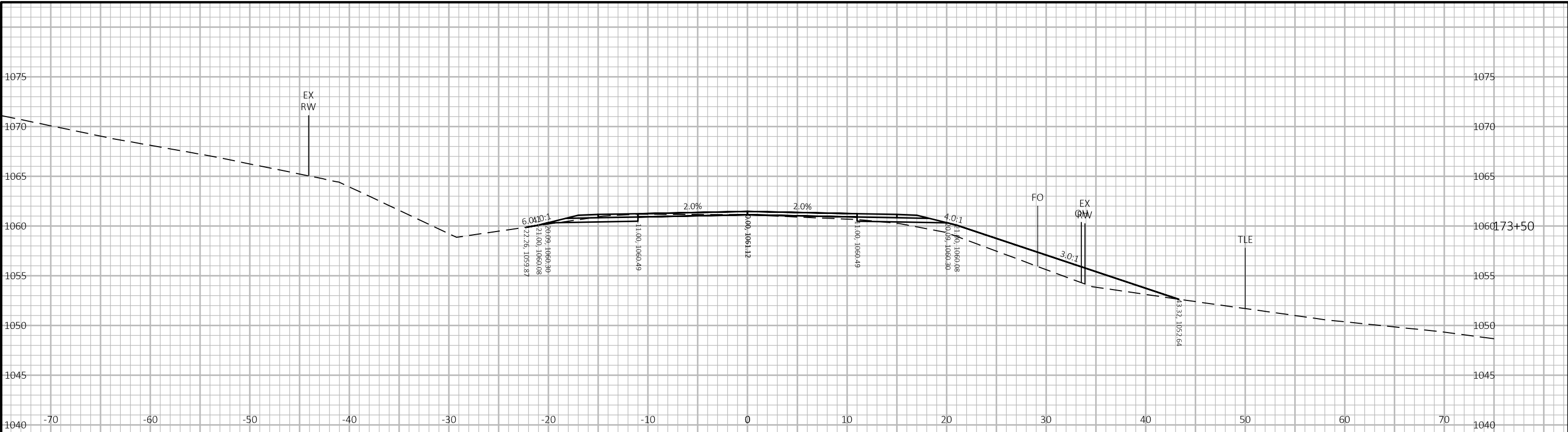


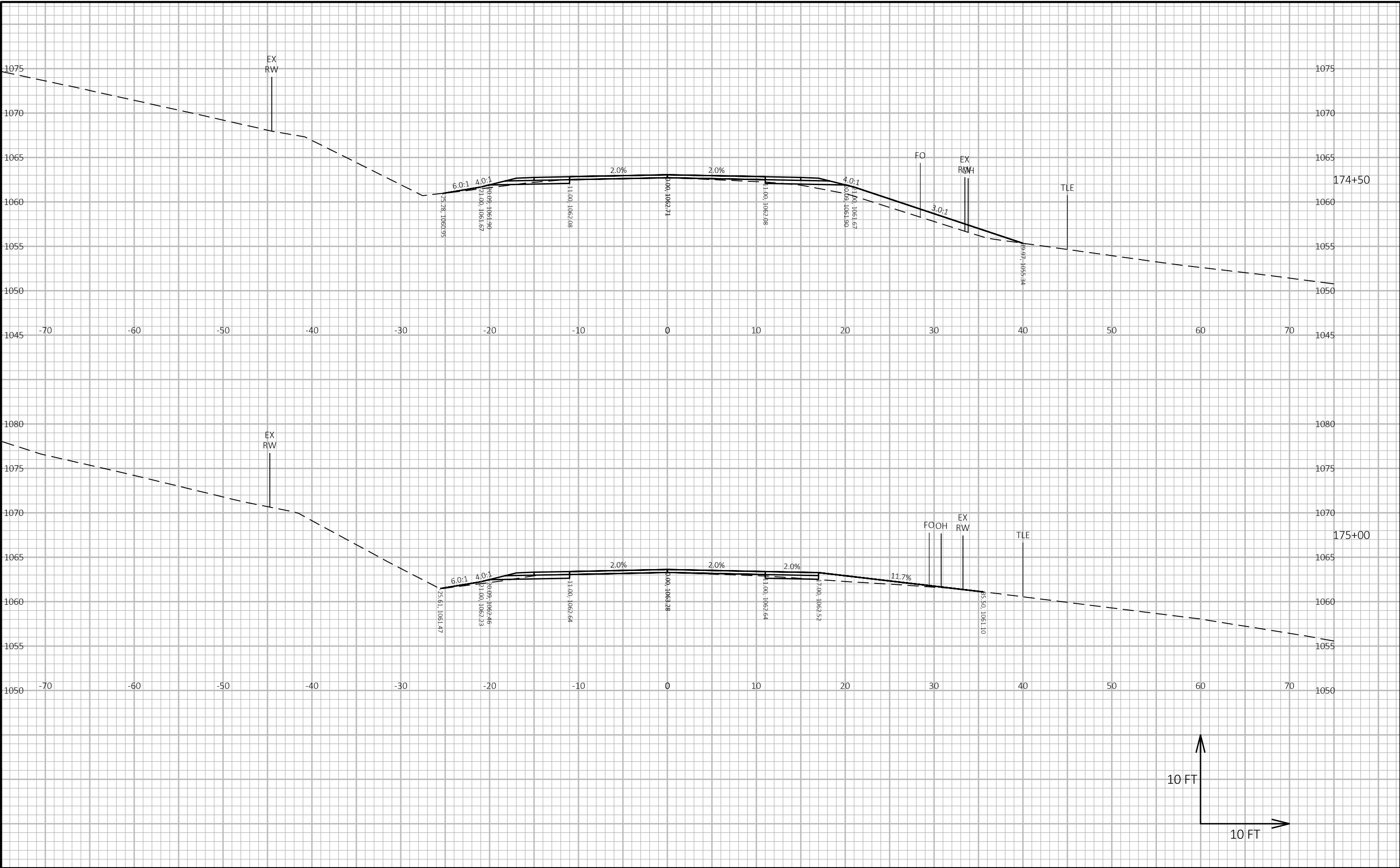
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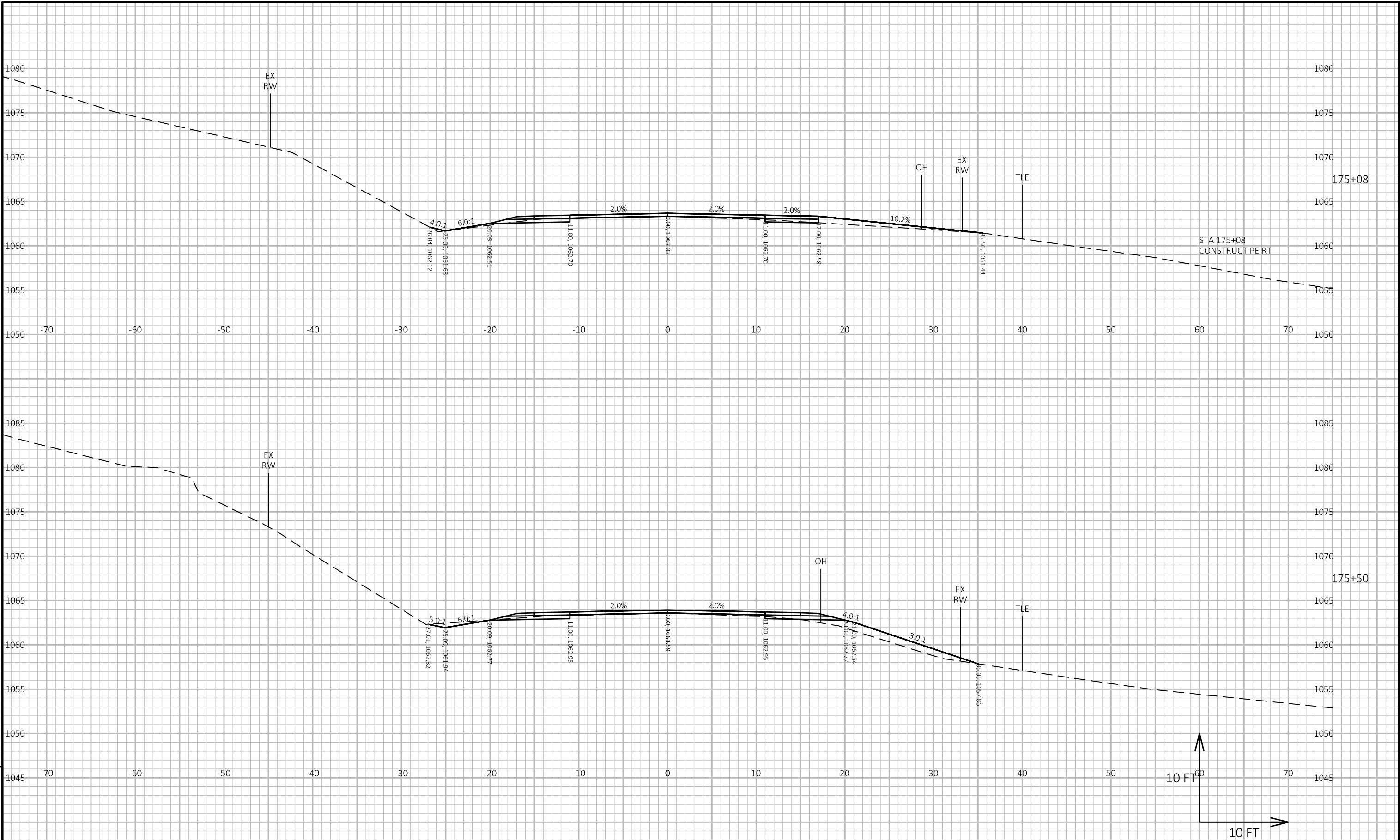


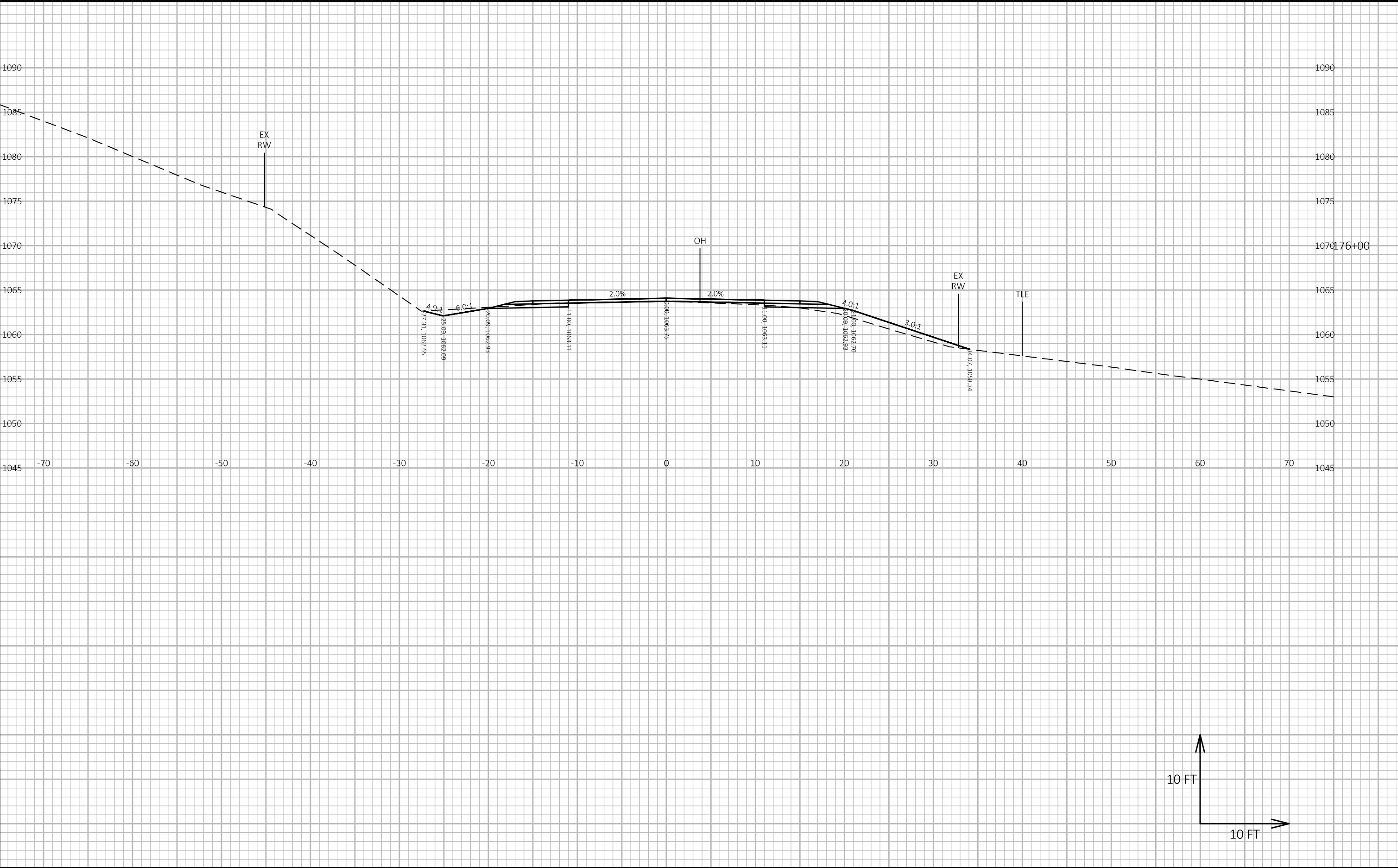




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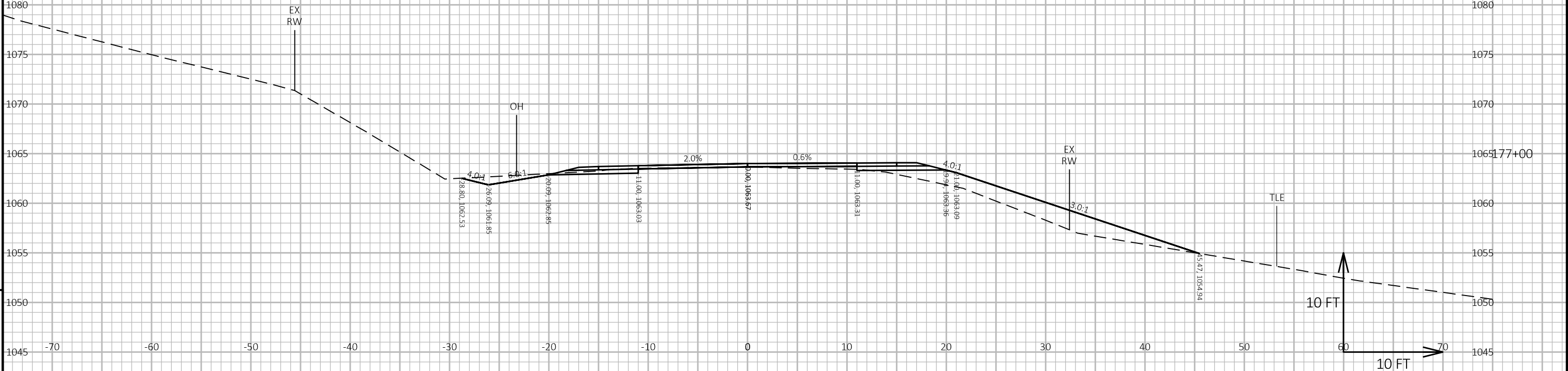
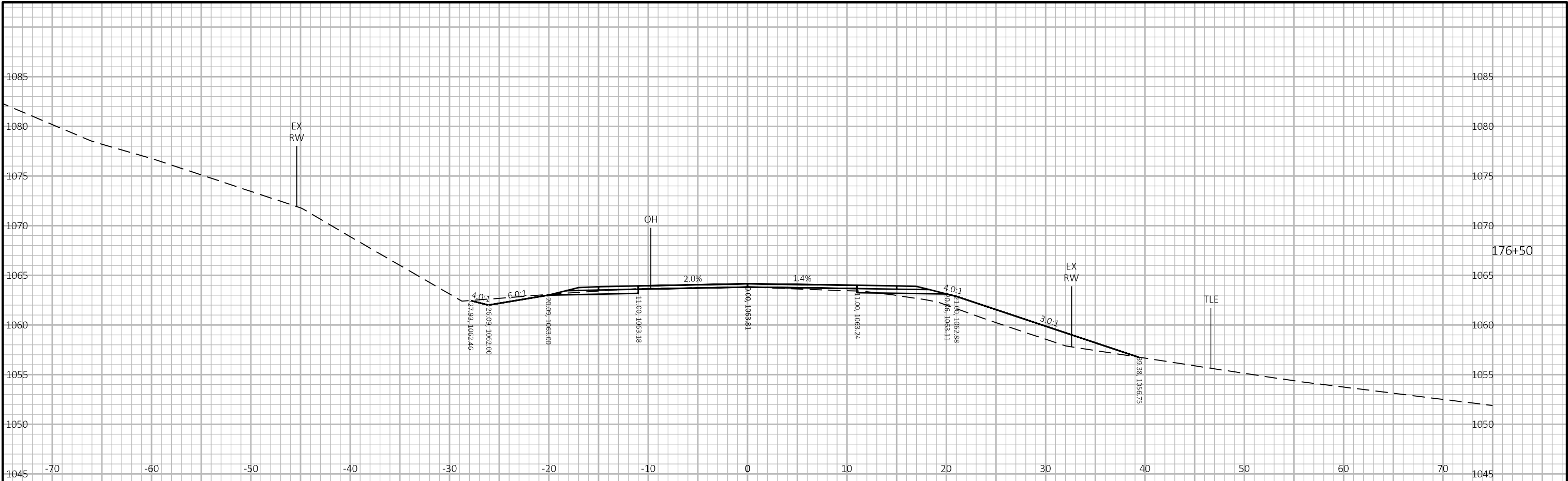
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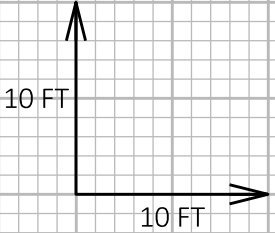
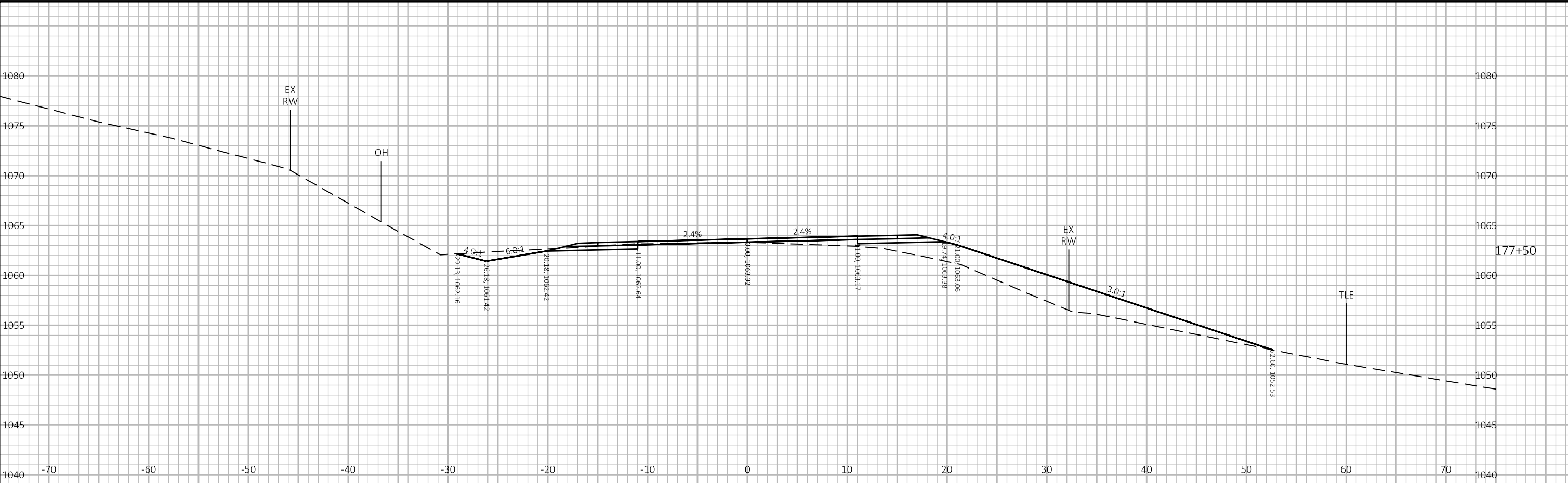




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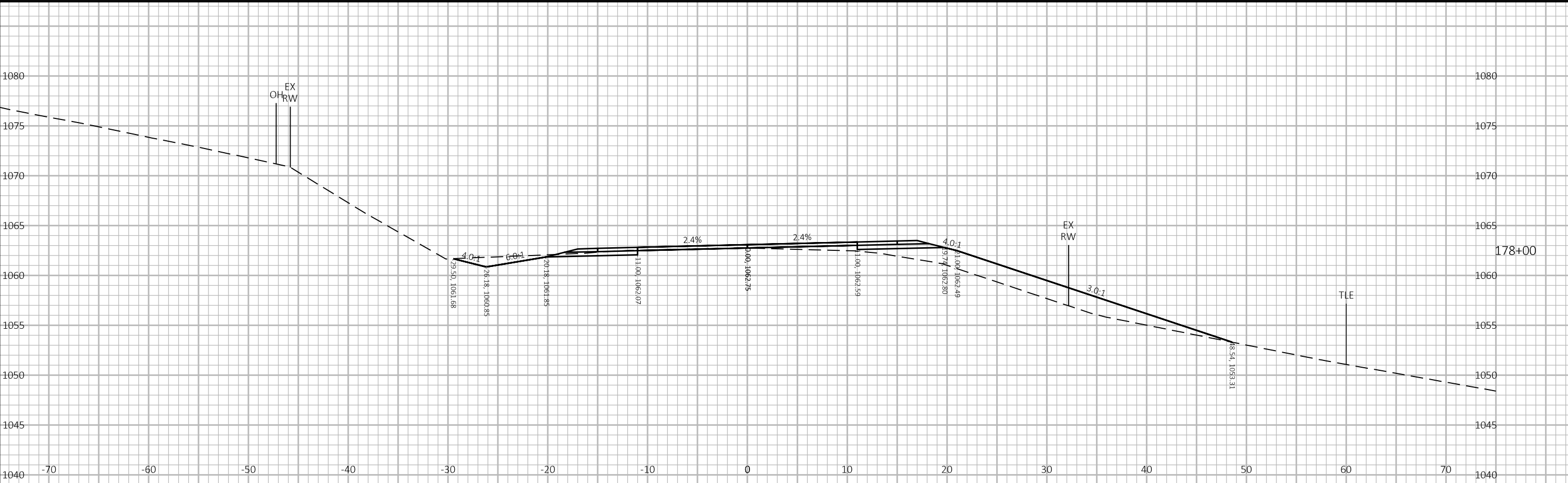
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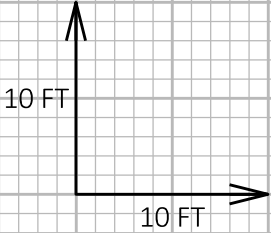
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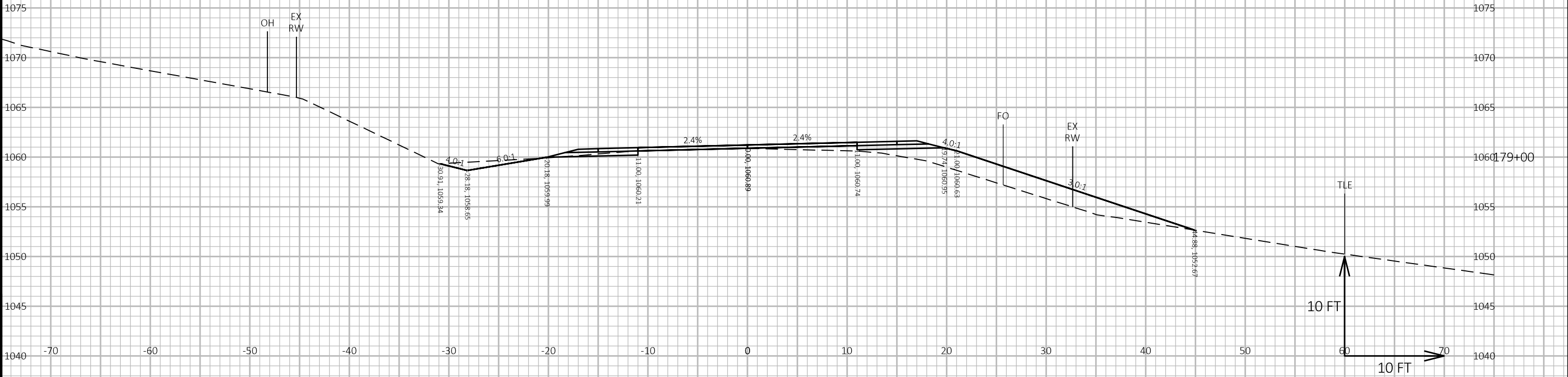
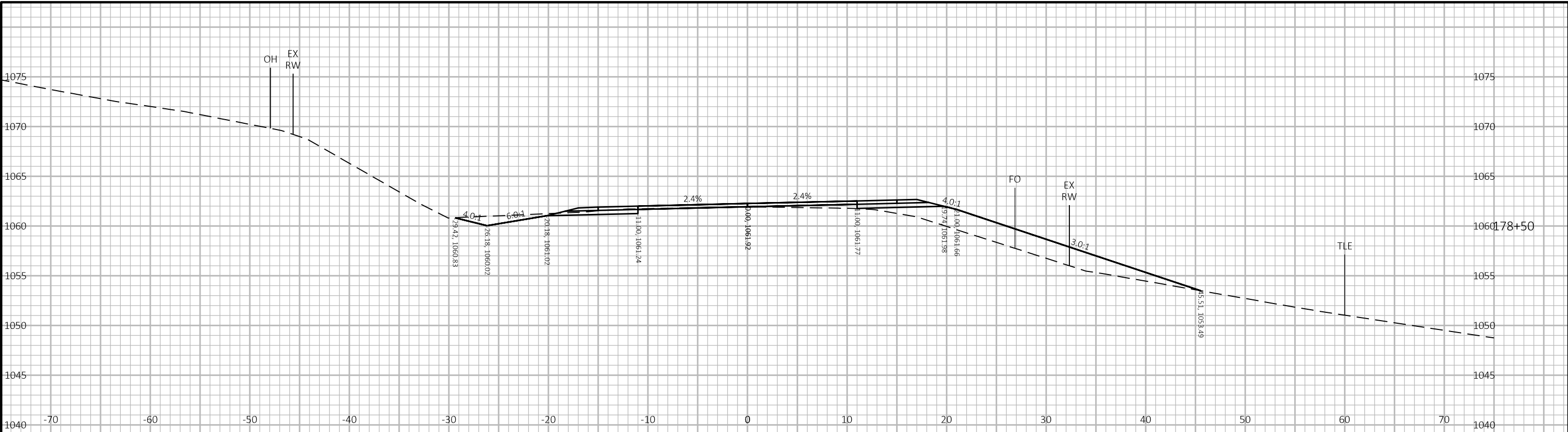
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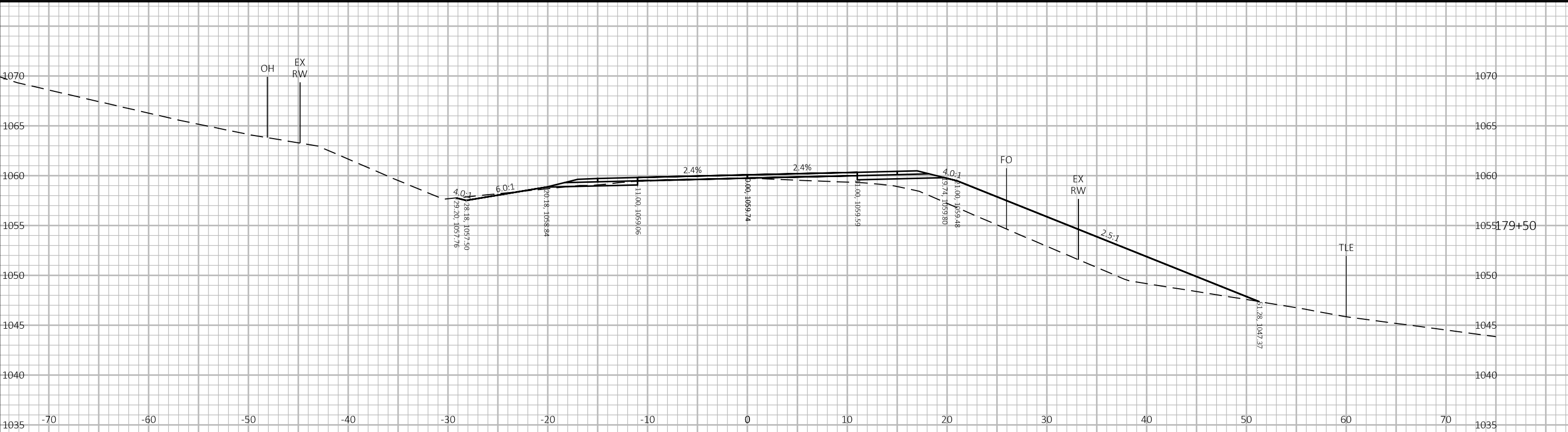
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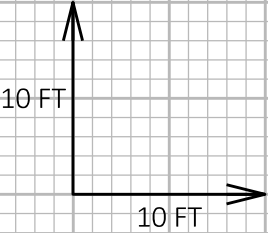
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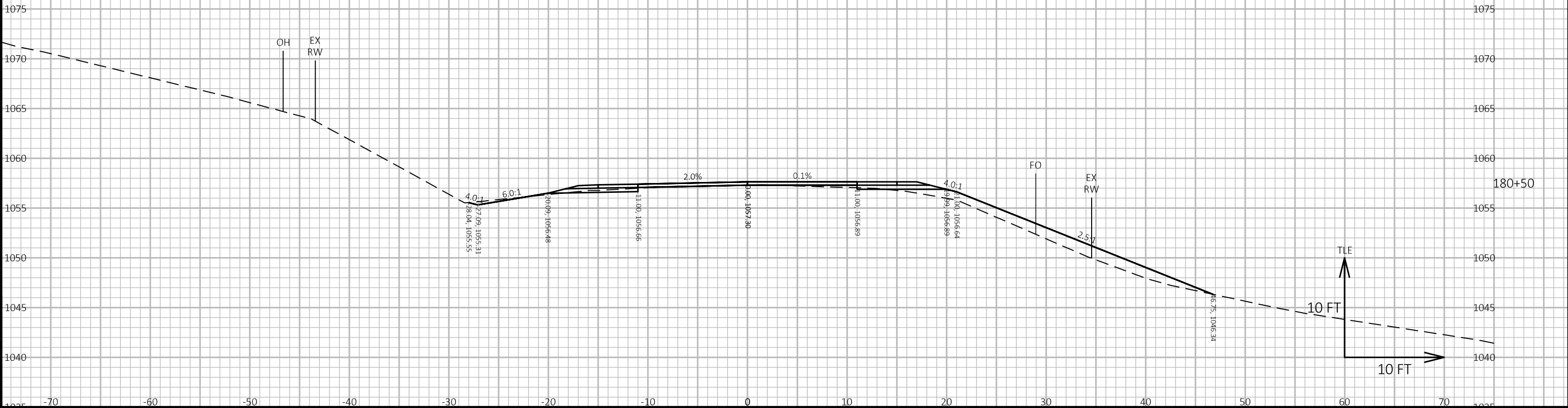
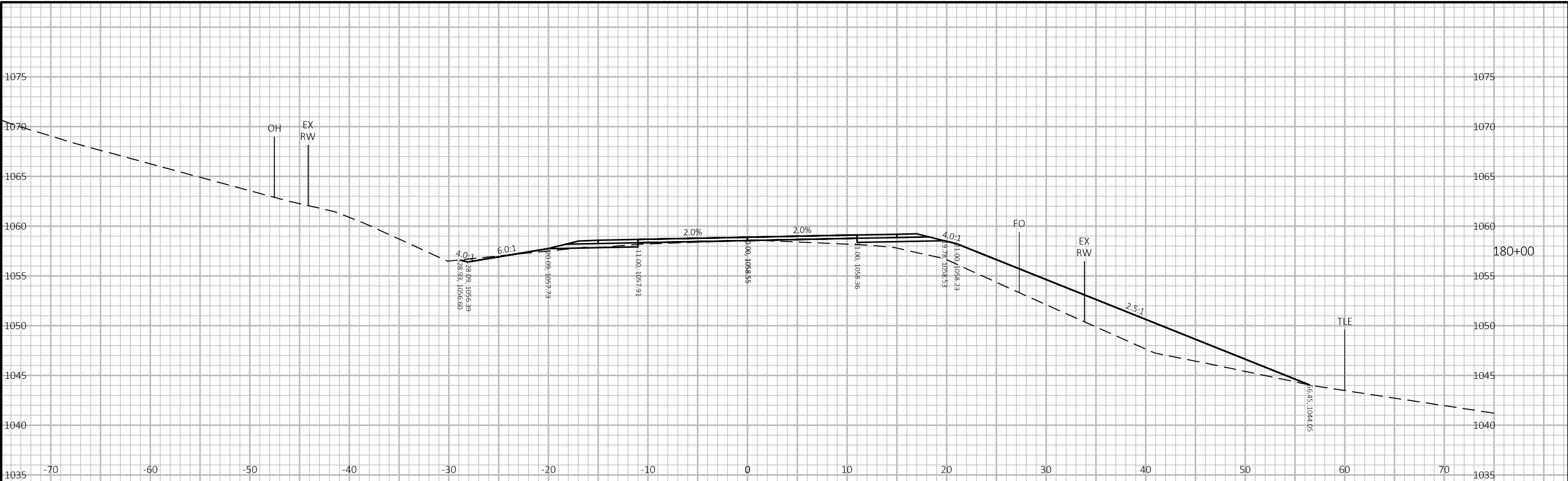
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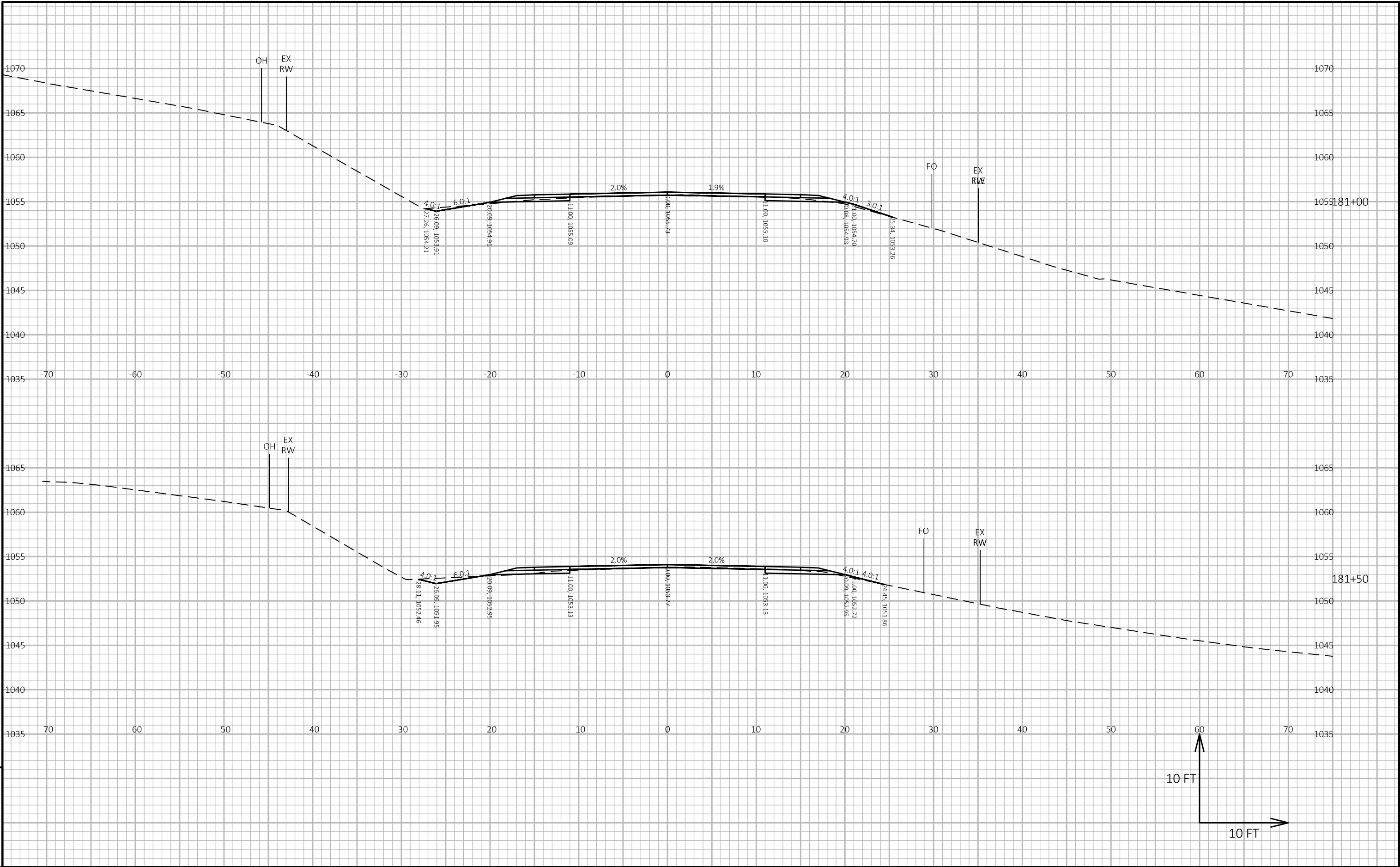


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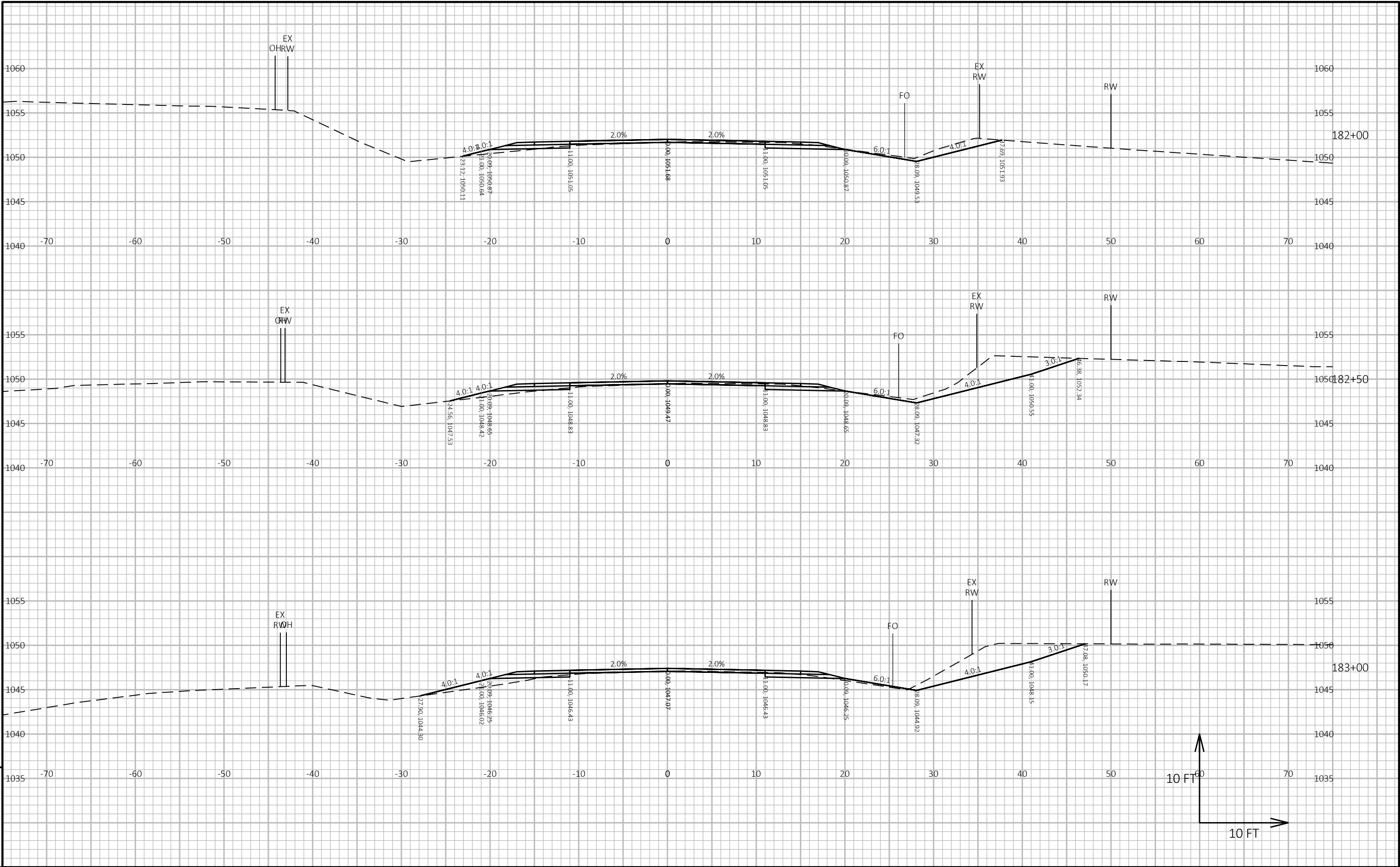


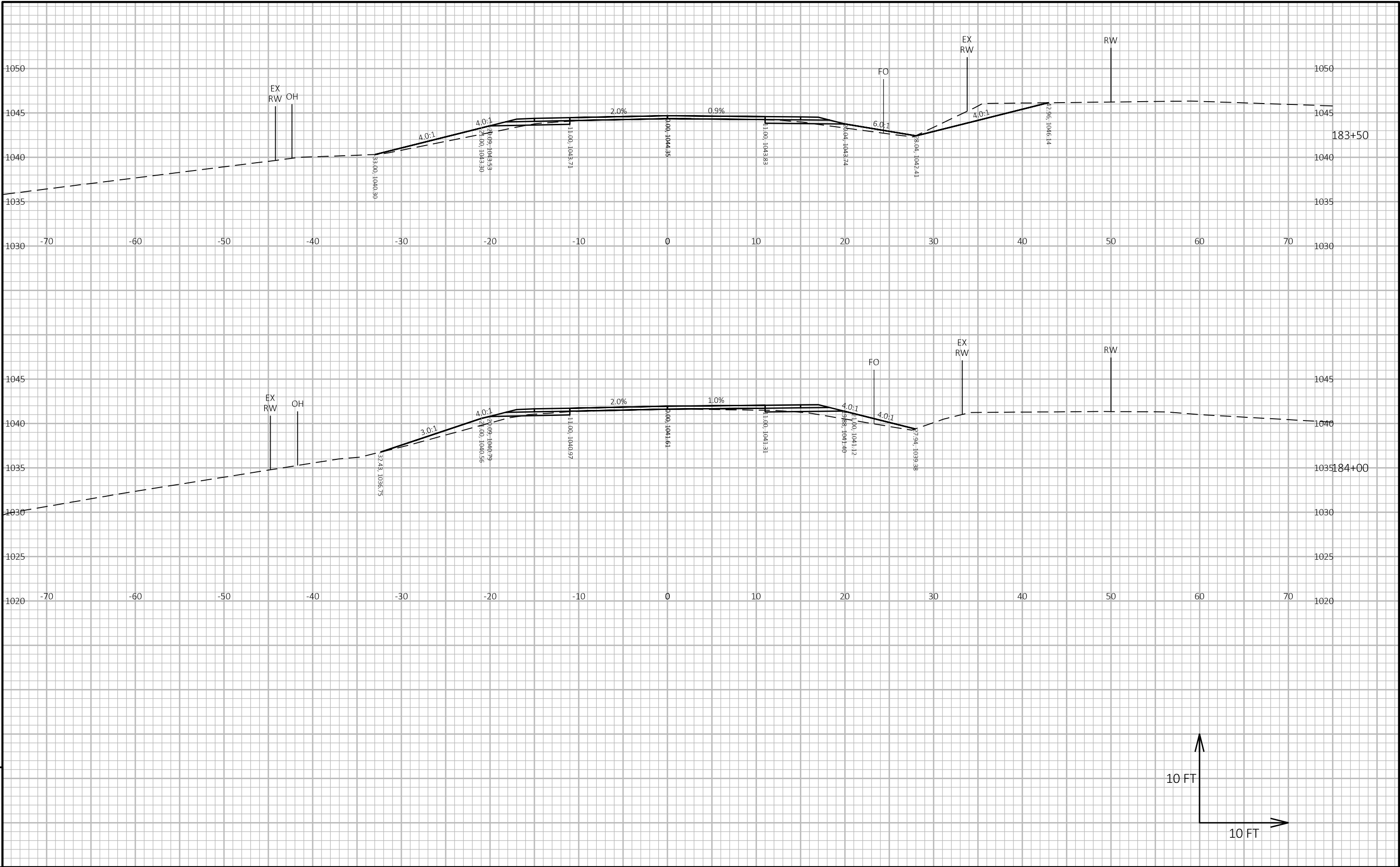




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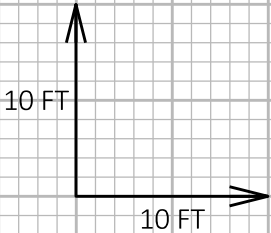
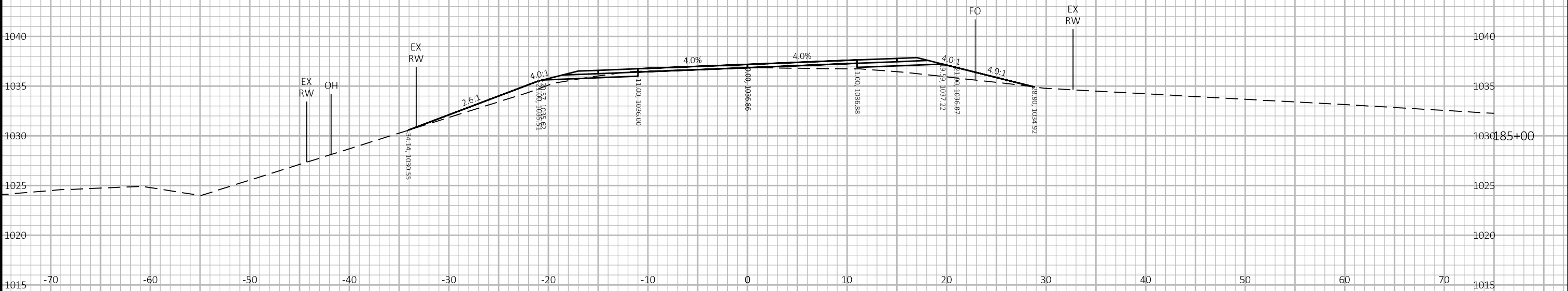
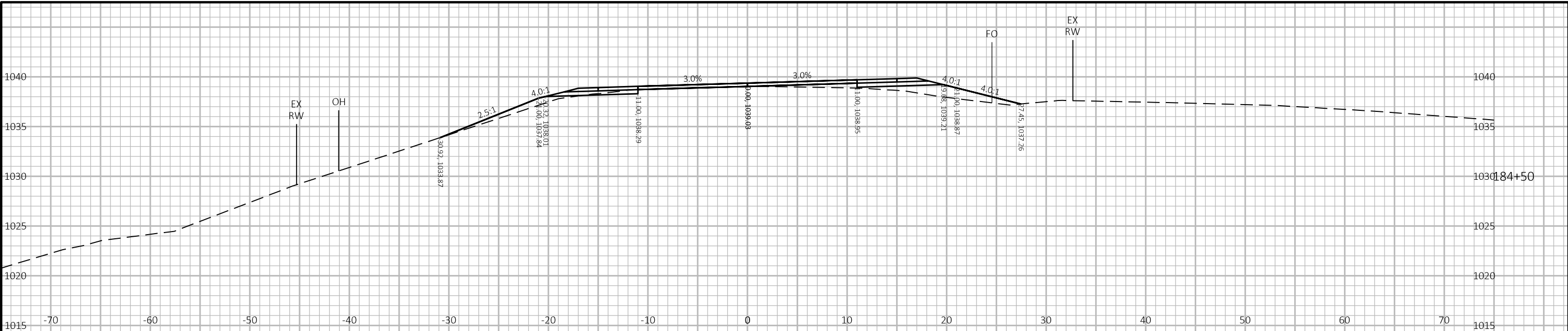
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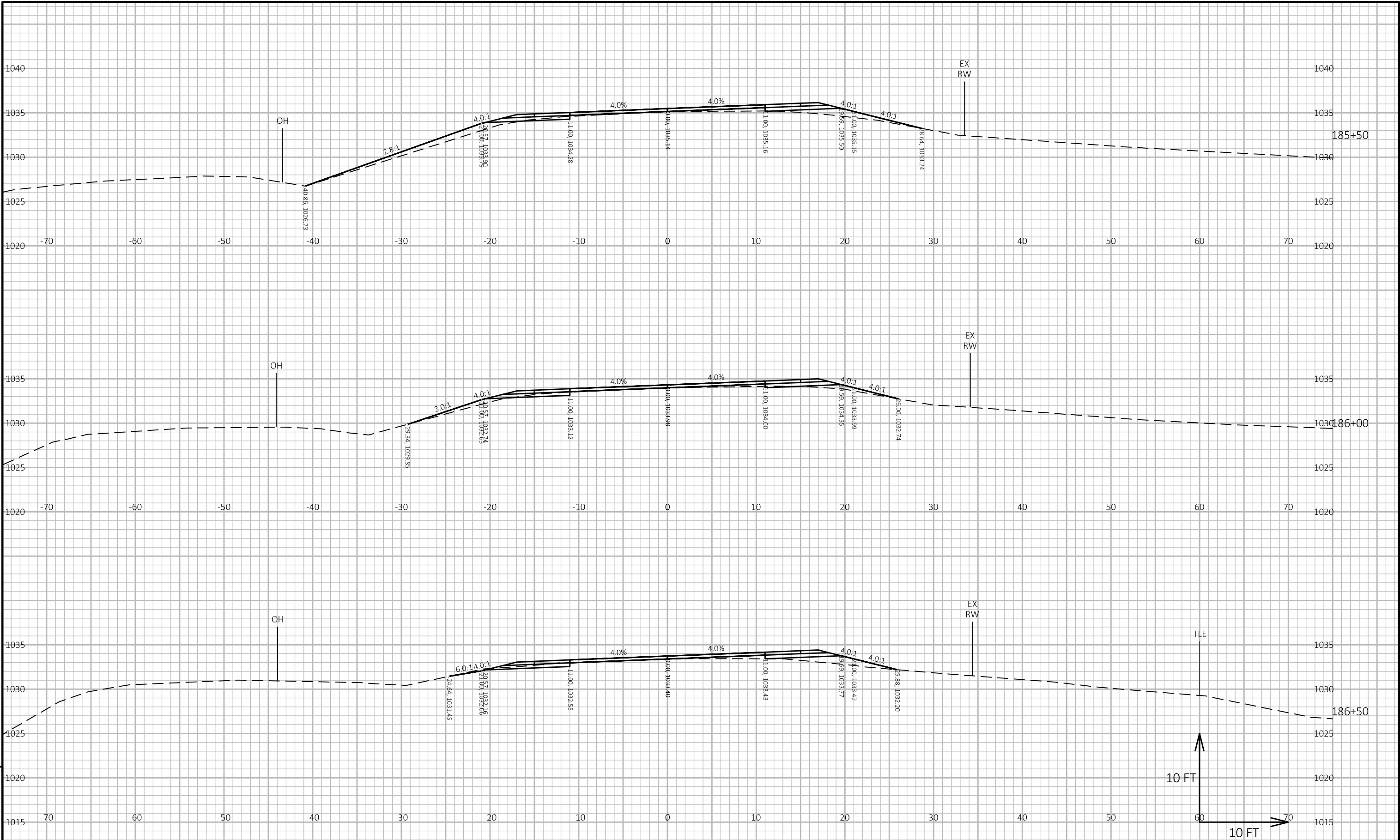
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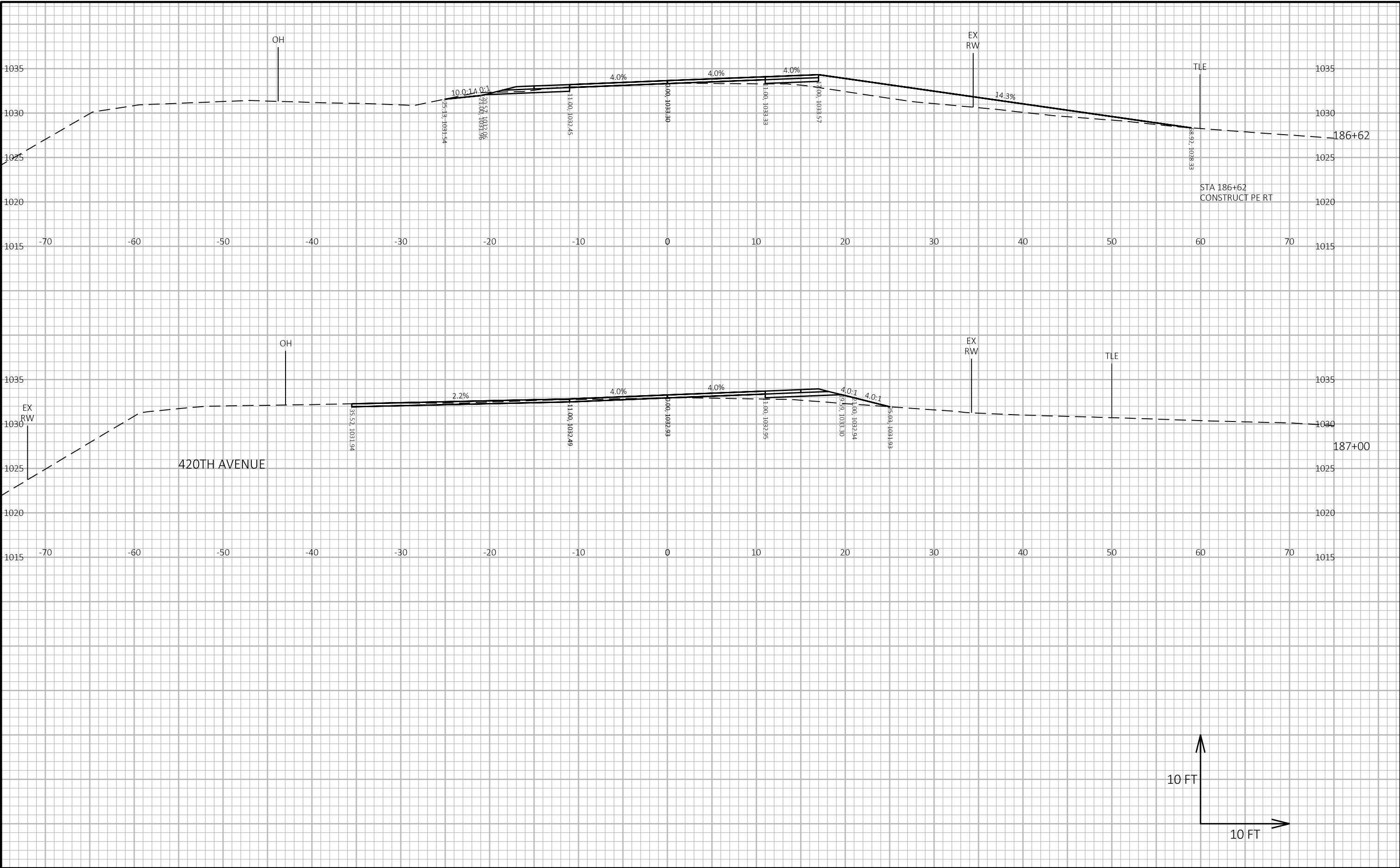
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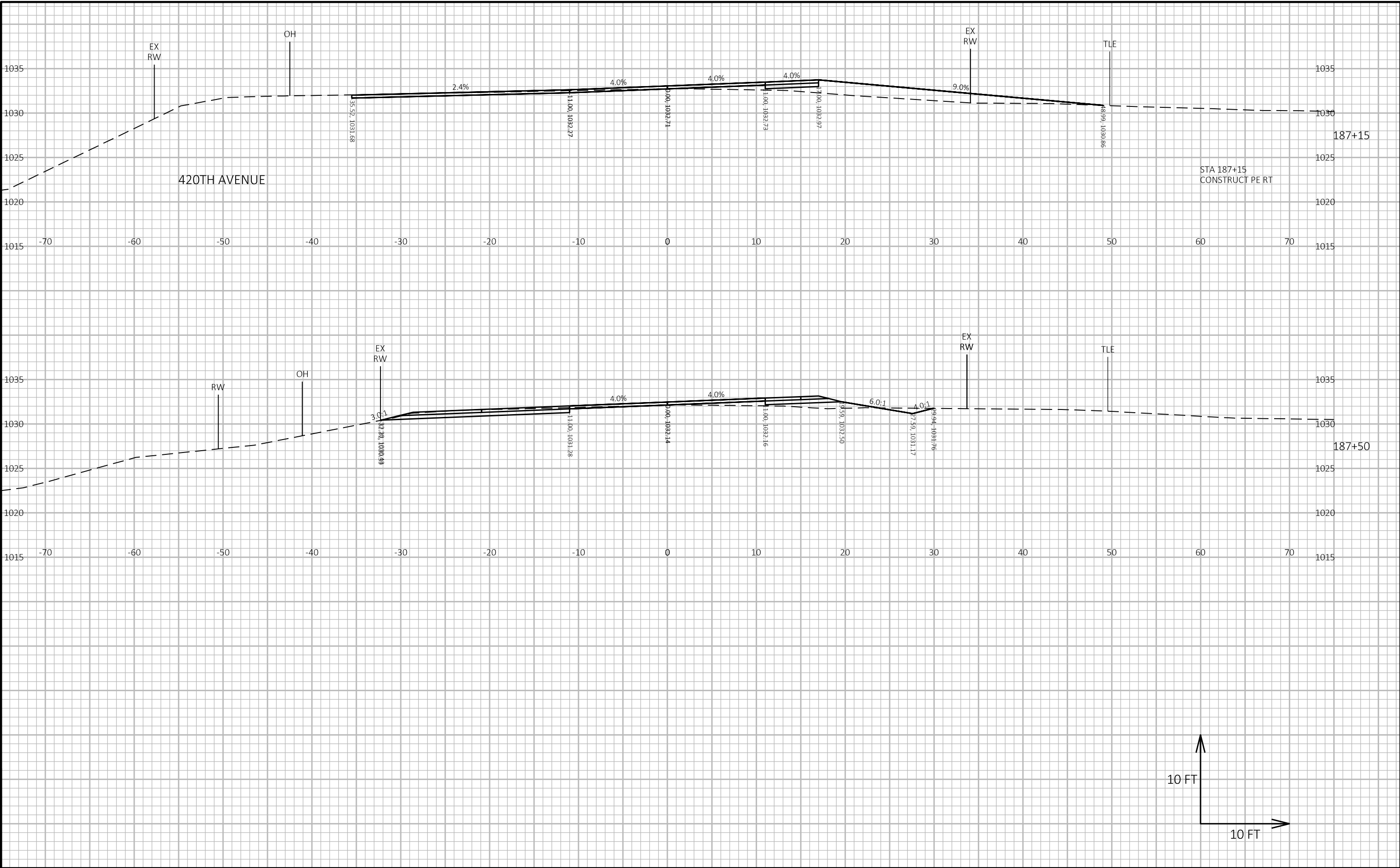


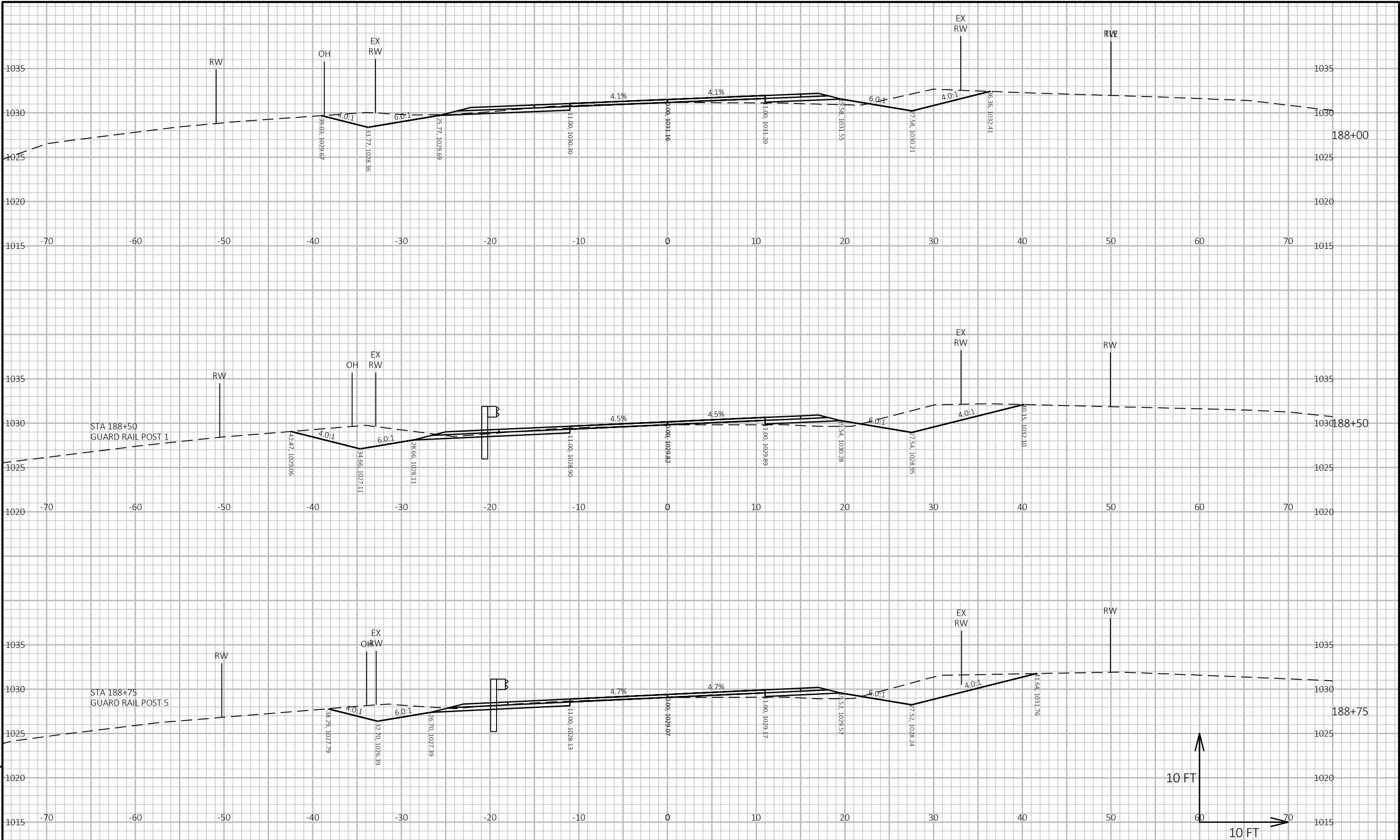
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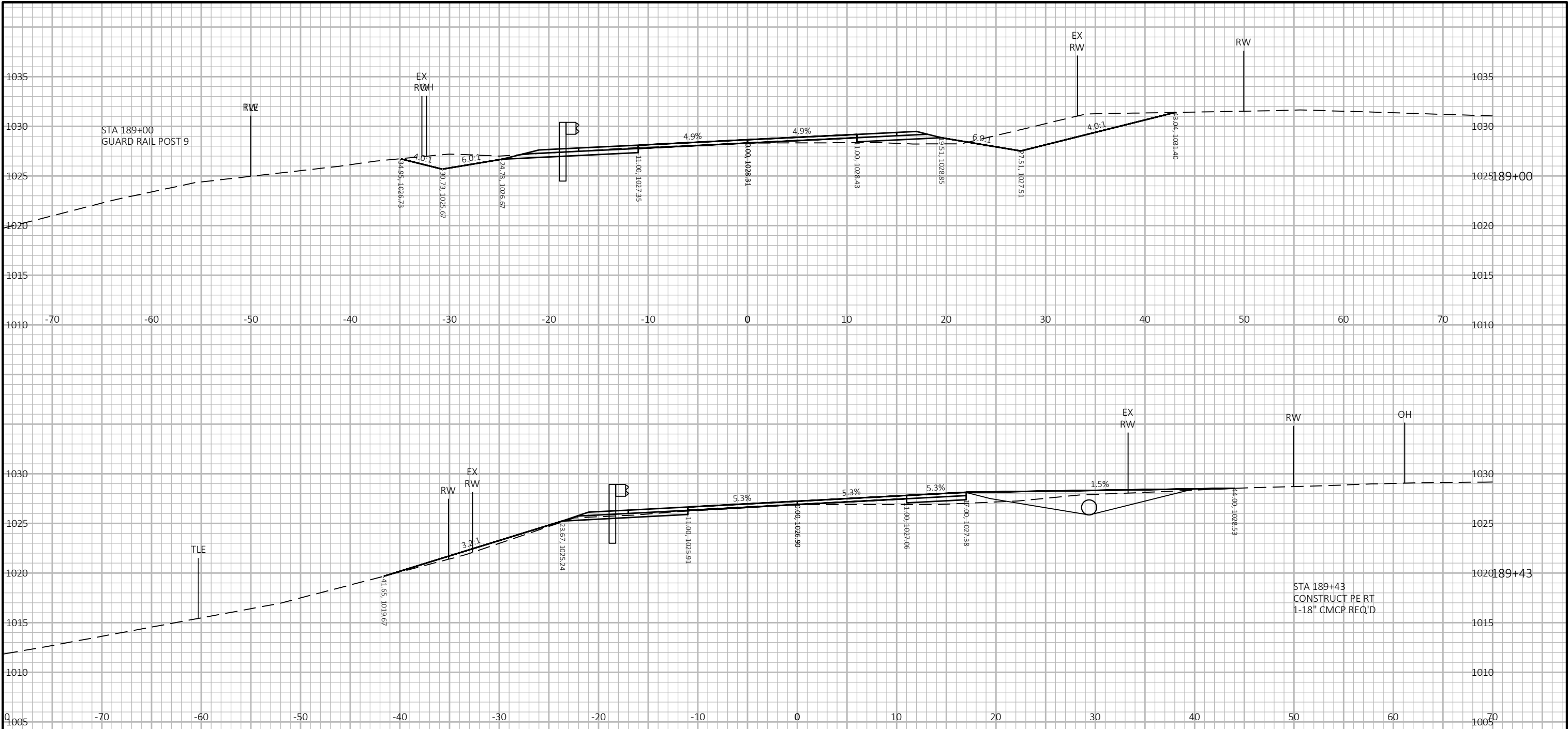
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PROJECT NO: 7881-05-73

HWY: CTH D

COUNTY: DUNN

CROSS SECTIONS: CTH D

SHEET 185

E

FILE NAME : I:\41\410859 DUNN CTH D\C3D\DESIGN\CORRIDORS\CORRIDOR-CTH D 4-INCH RAISE.DWG
LAYOUT NAME - 974

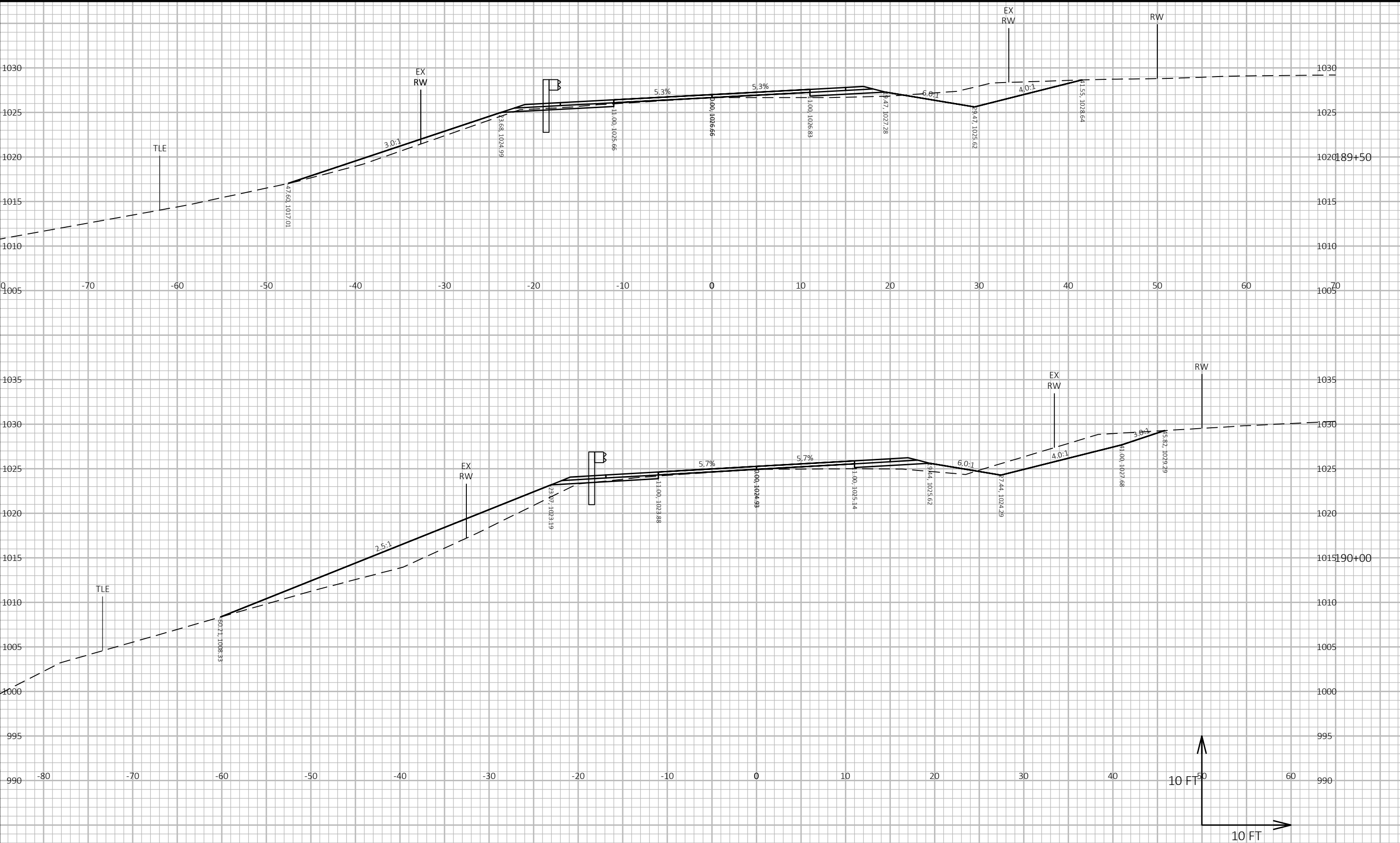
PLOT DATE : 5/21/2024 11:02 AM

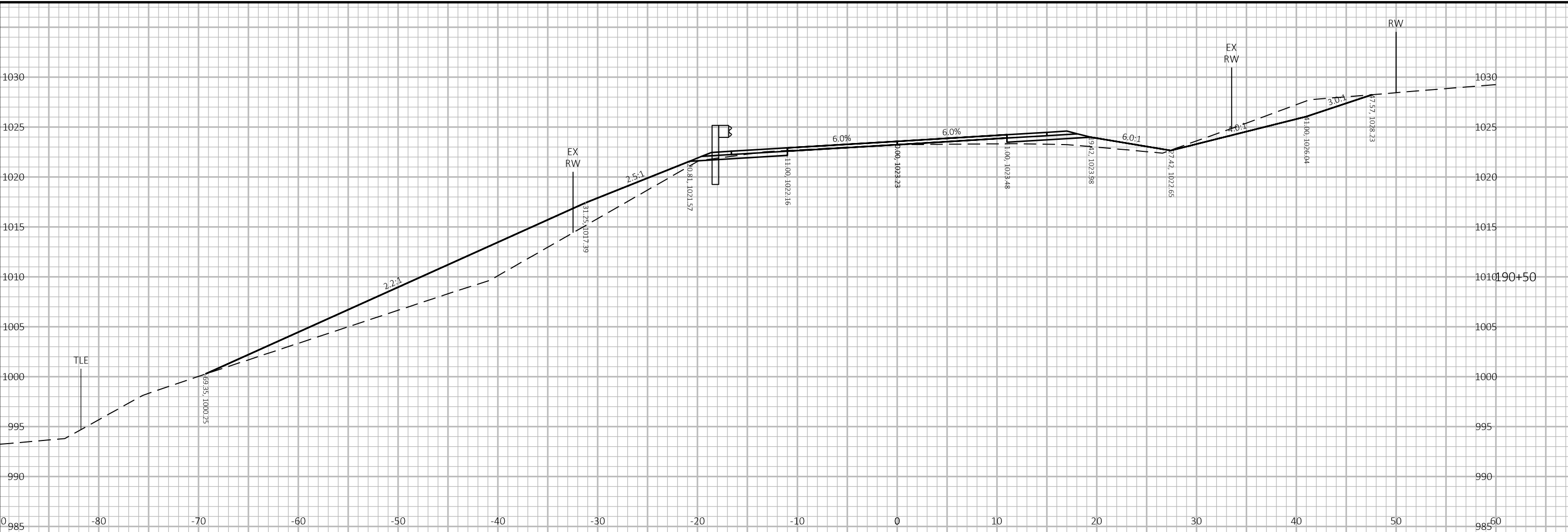
PLOT BY : HEDRINGTON, MARK

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

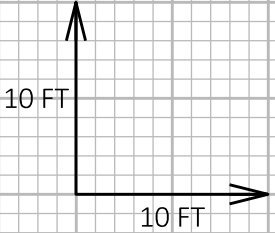
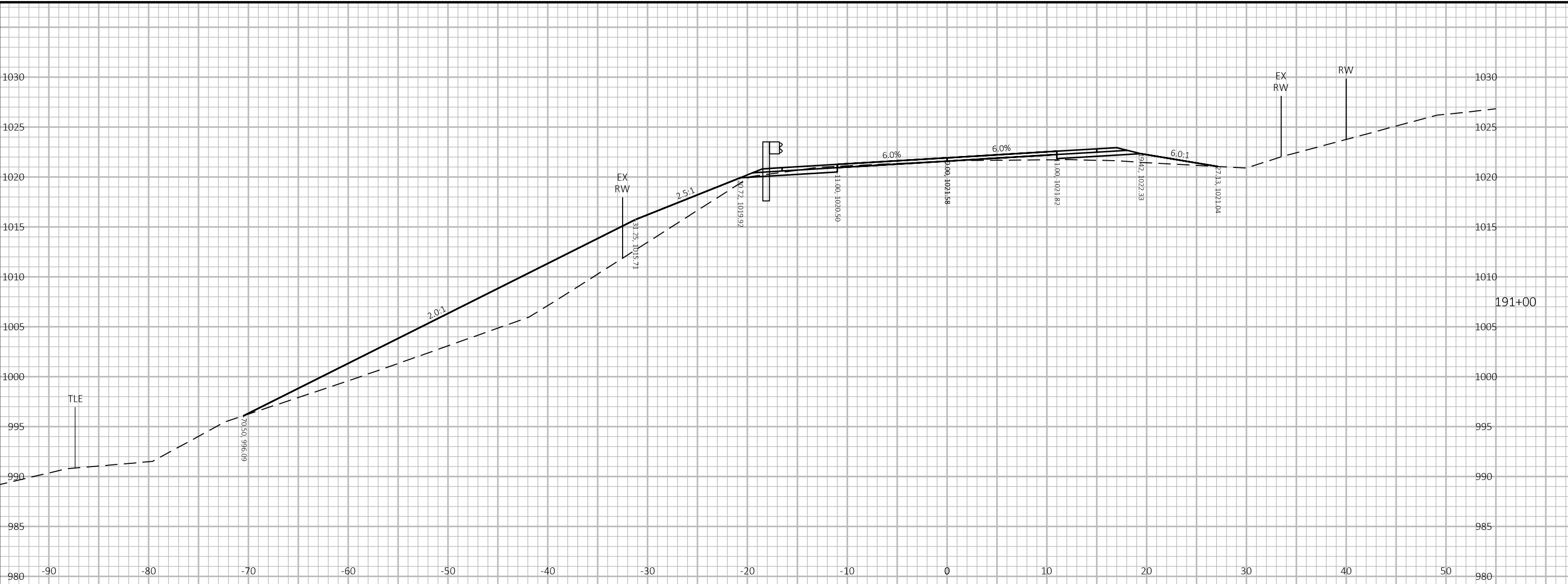
WISDOT/CADDs SHEET 49





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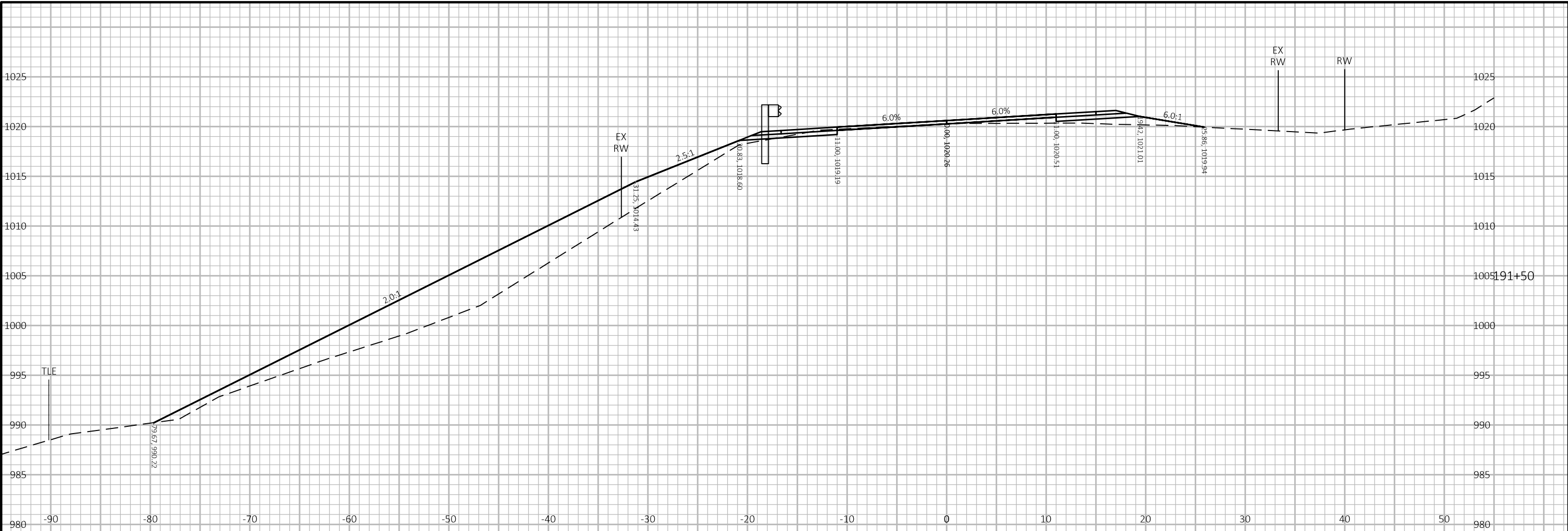
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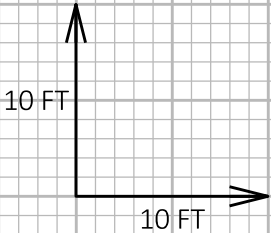
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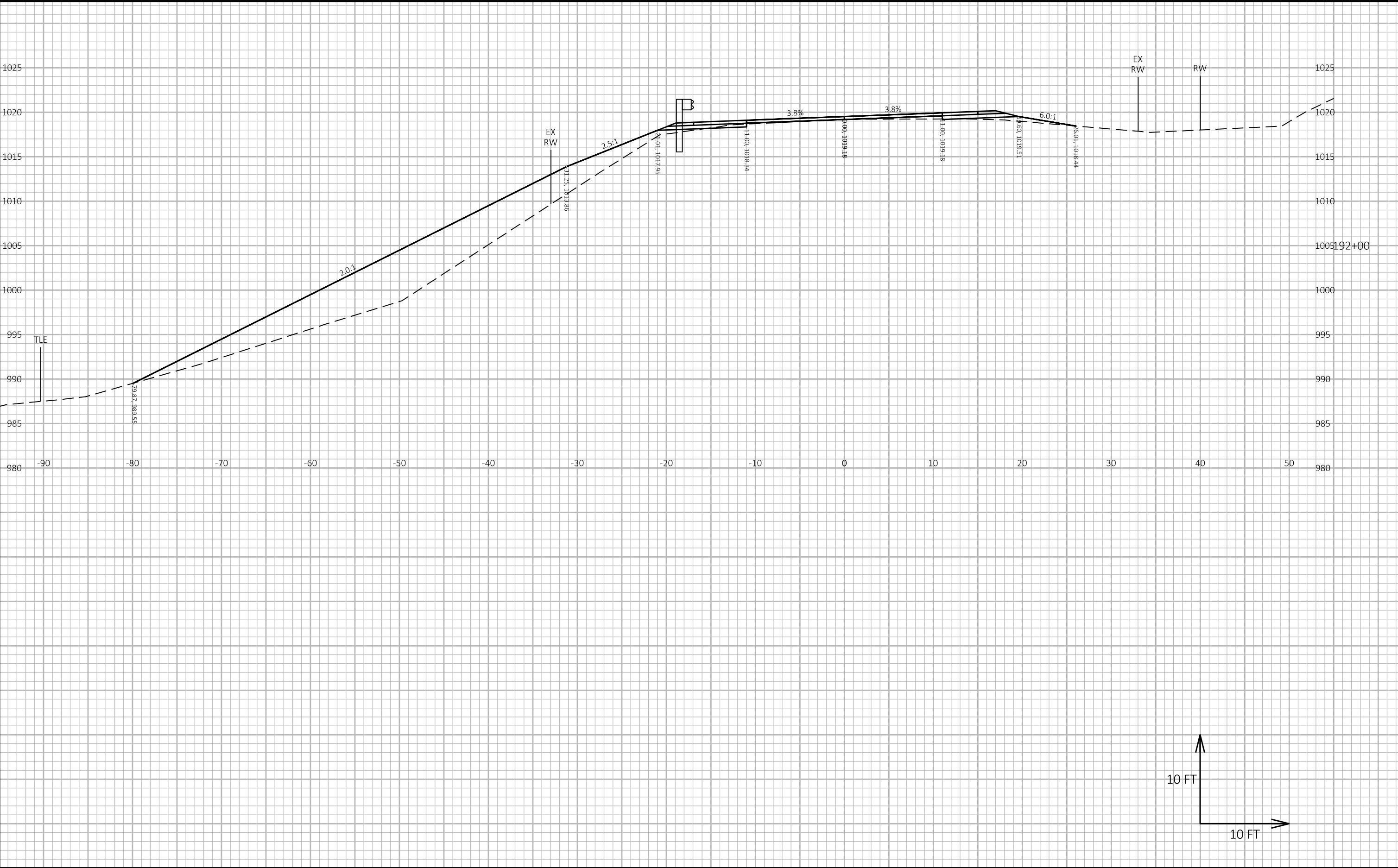
PROJECT NO: 7881-05-73	HWY: CTH D	COUNTY: DUNN	CROSS SECTIONS: CTH D	SHEET 188	E
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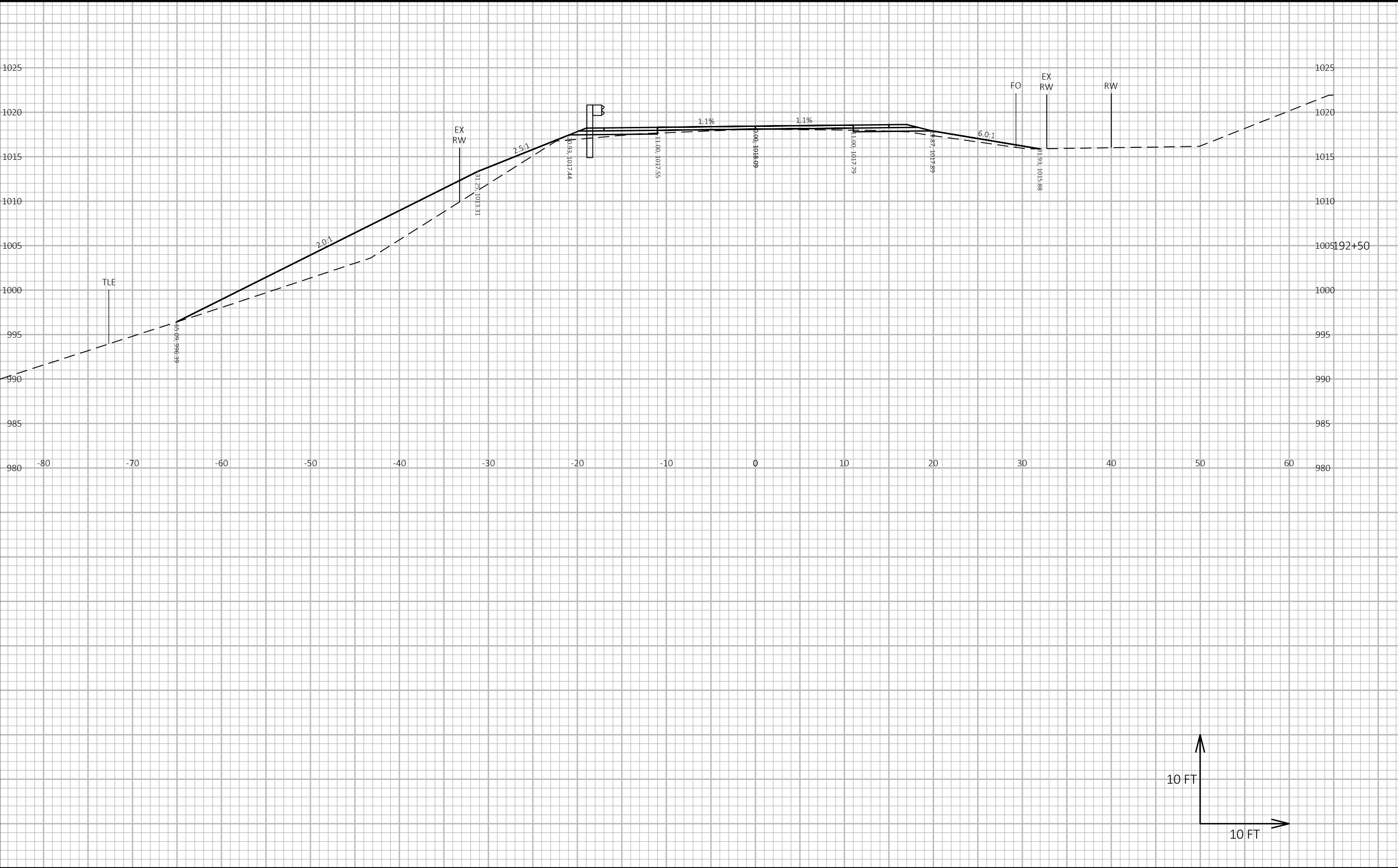


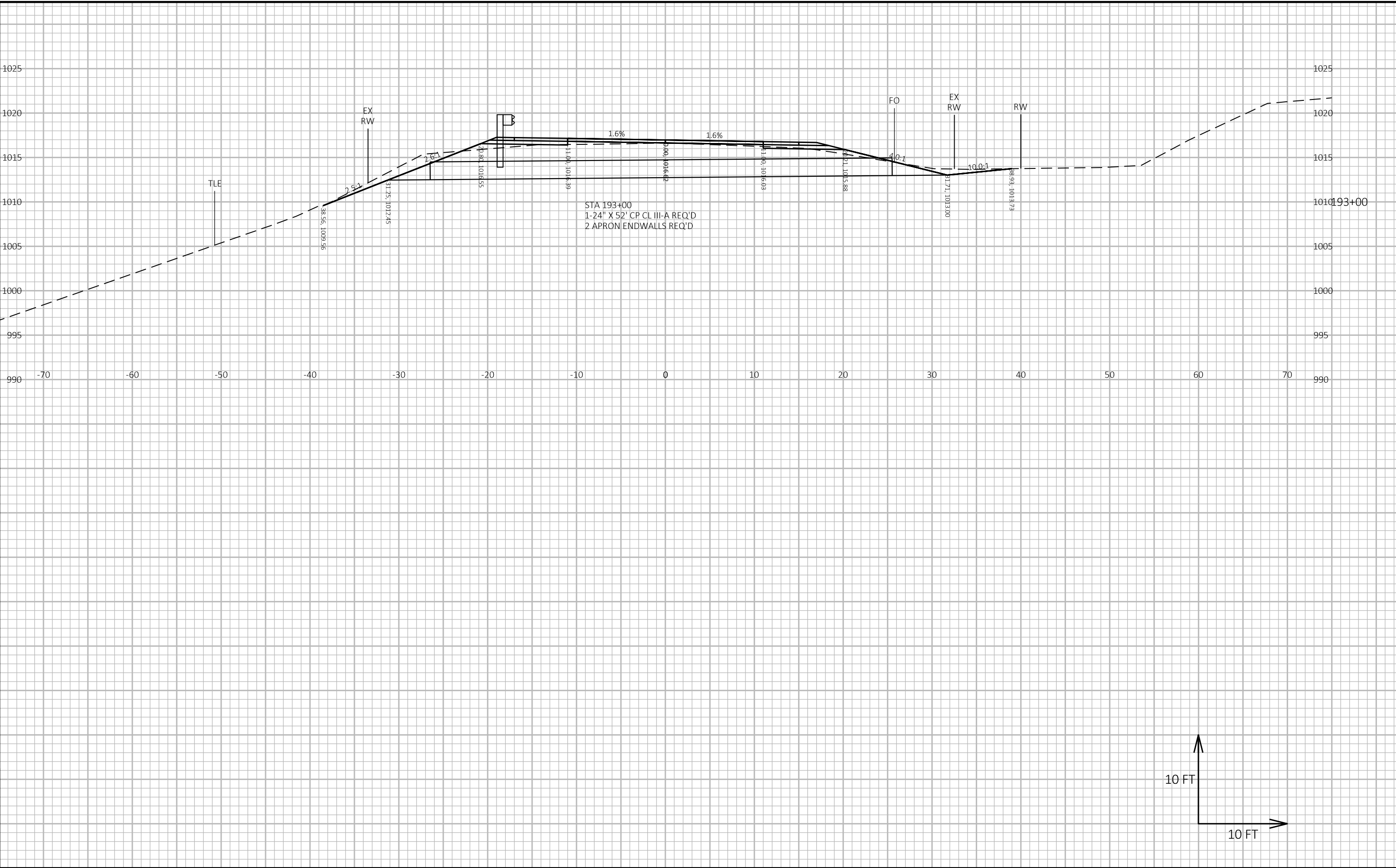
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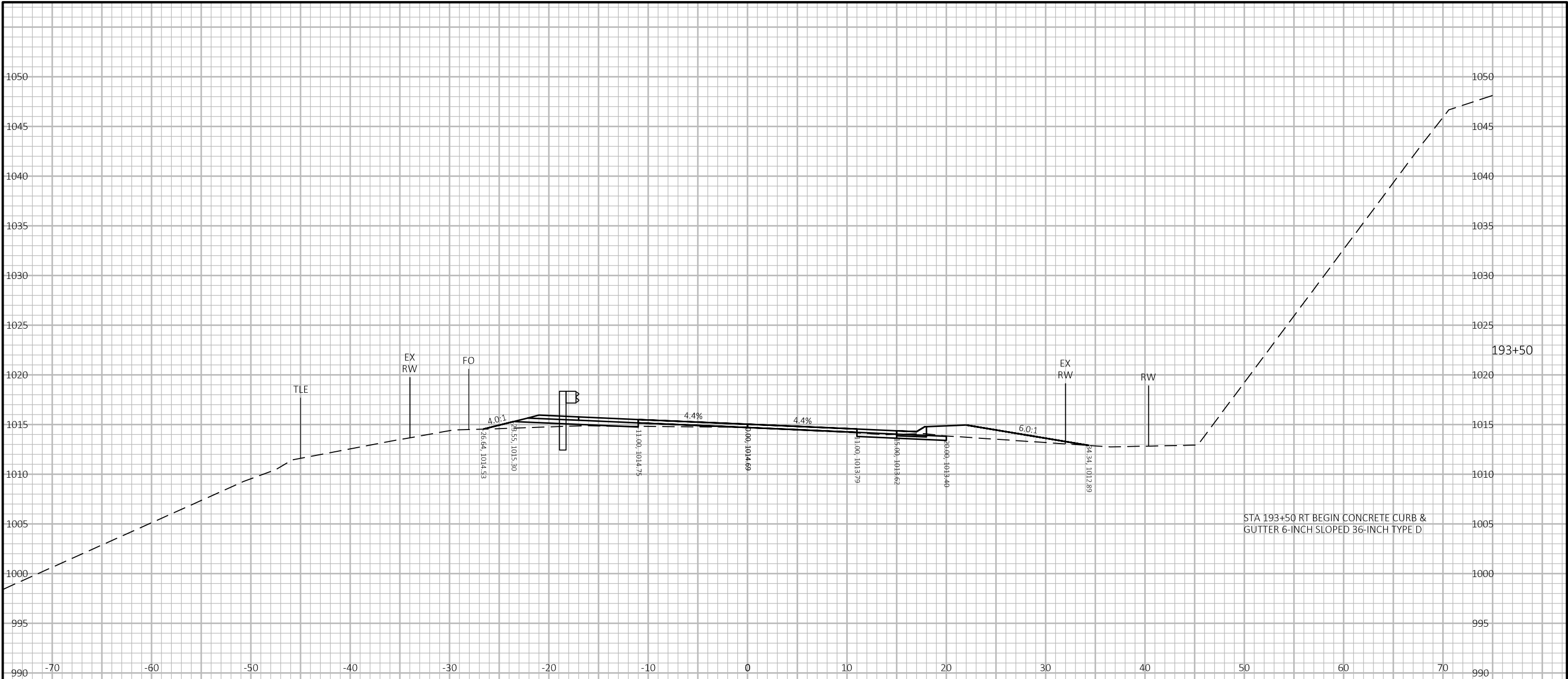






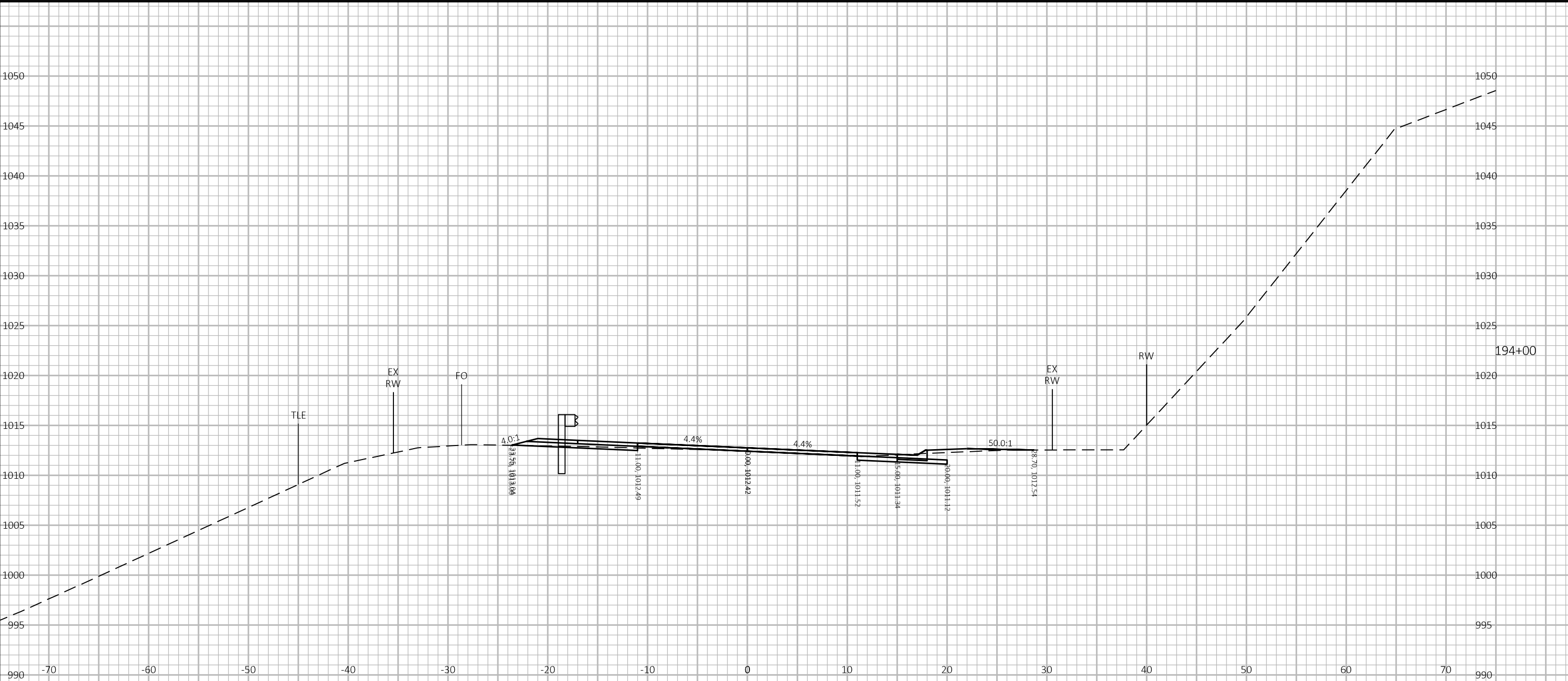
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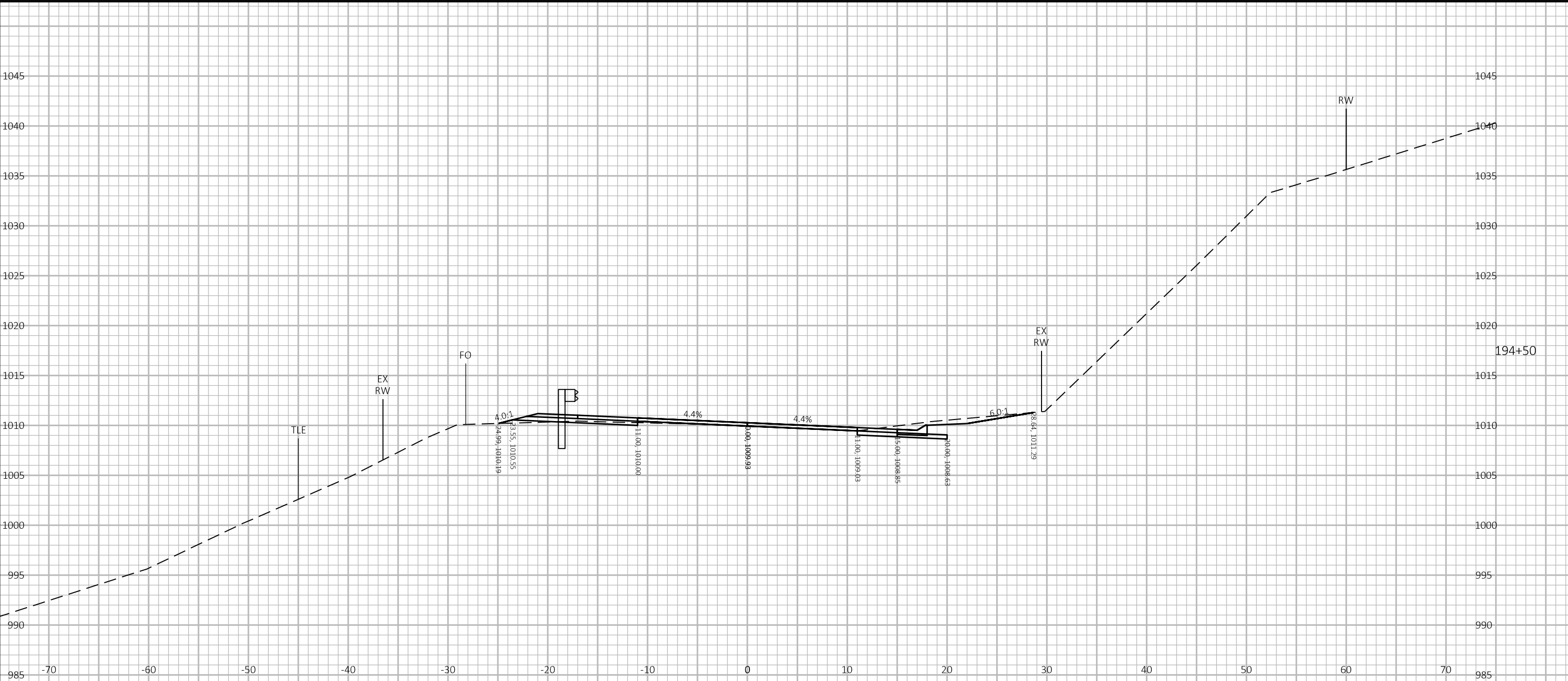
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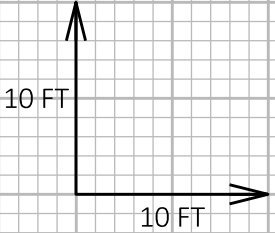
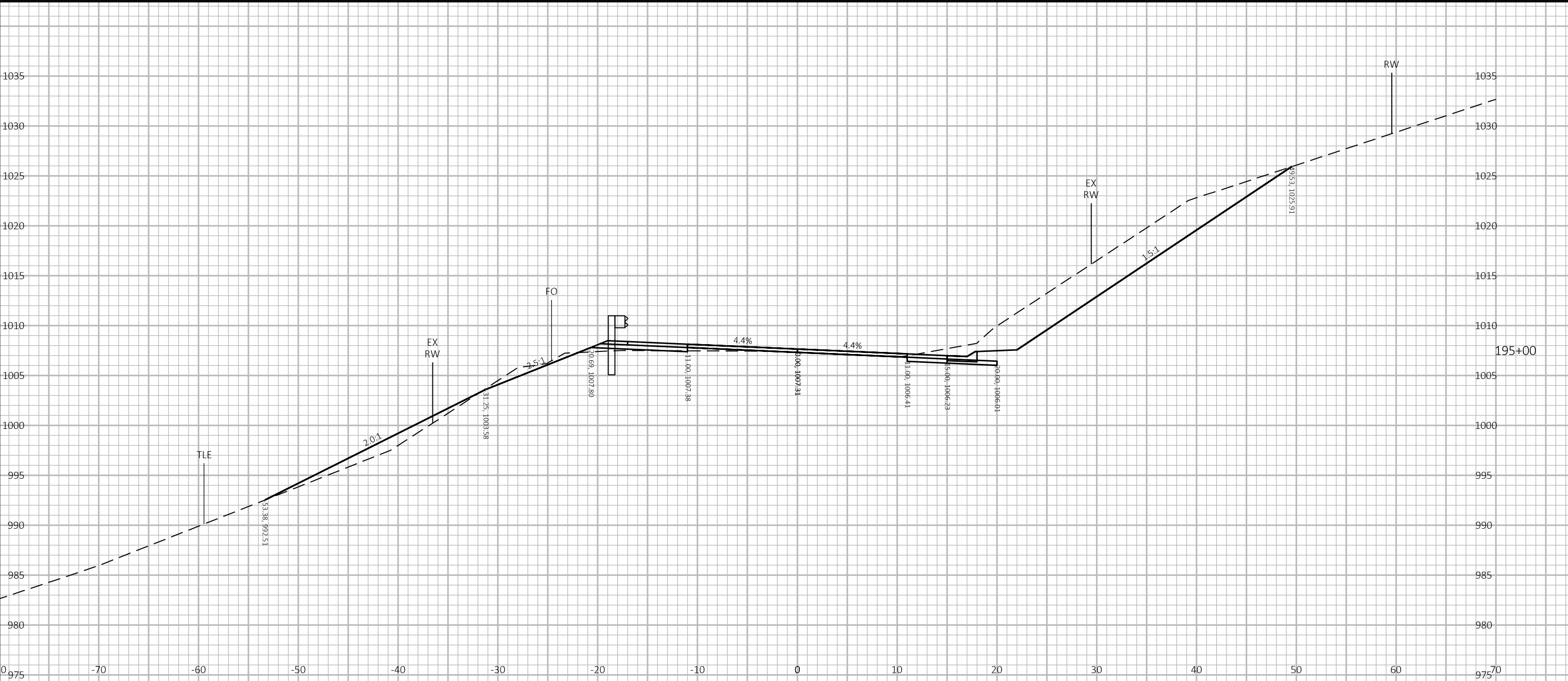
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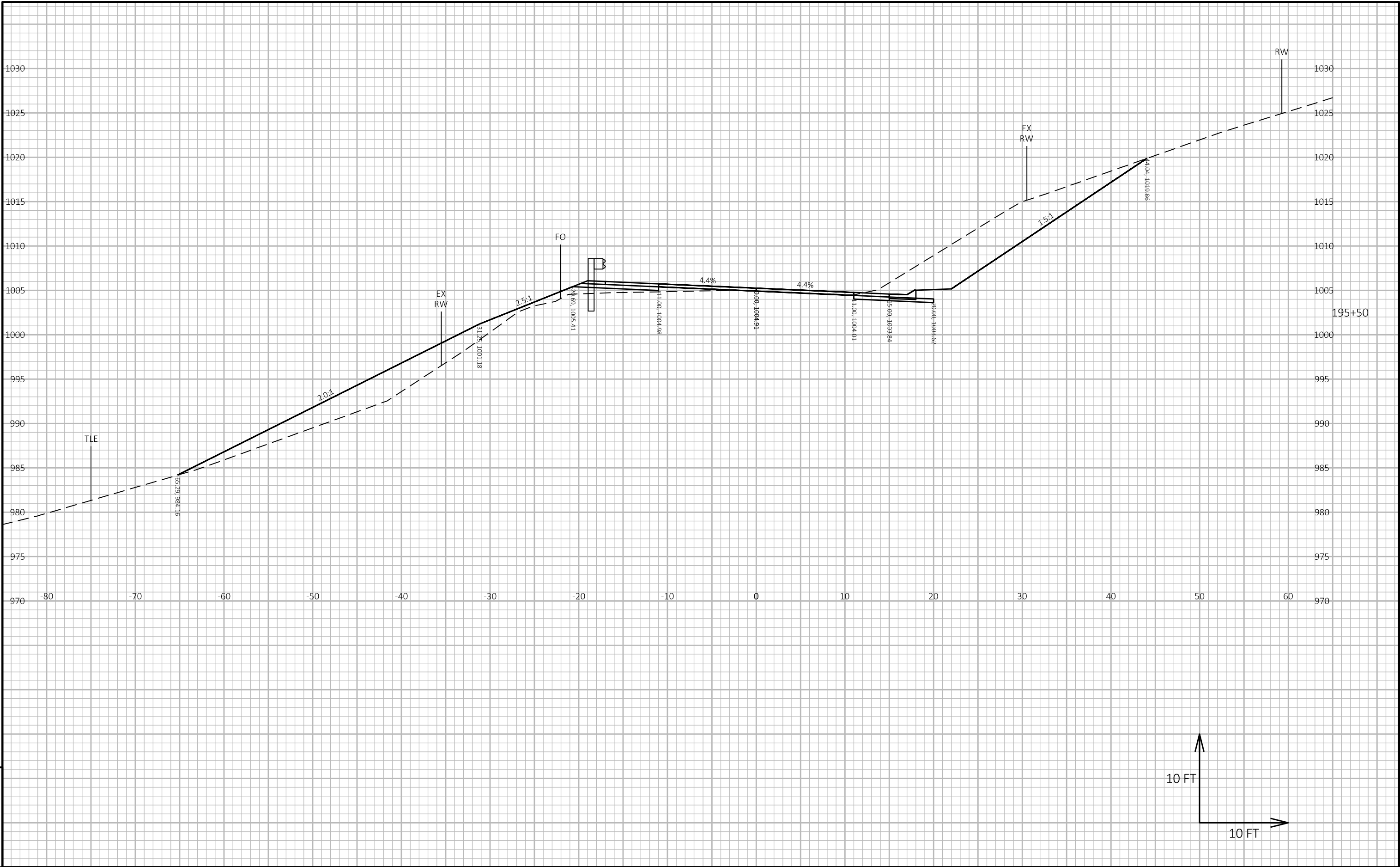
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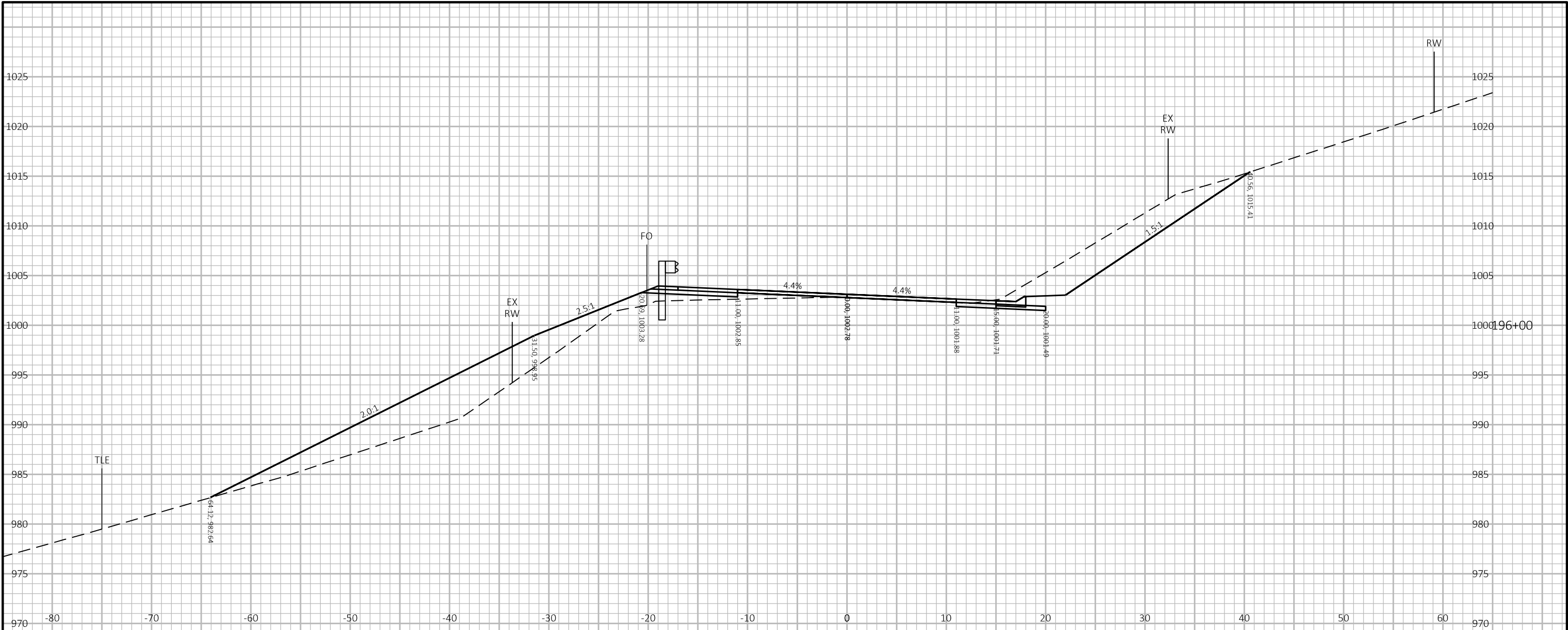
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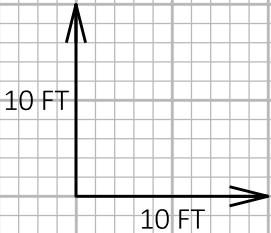
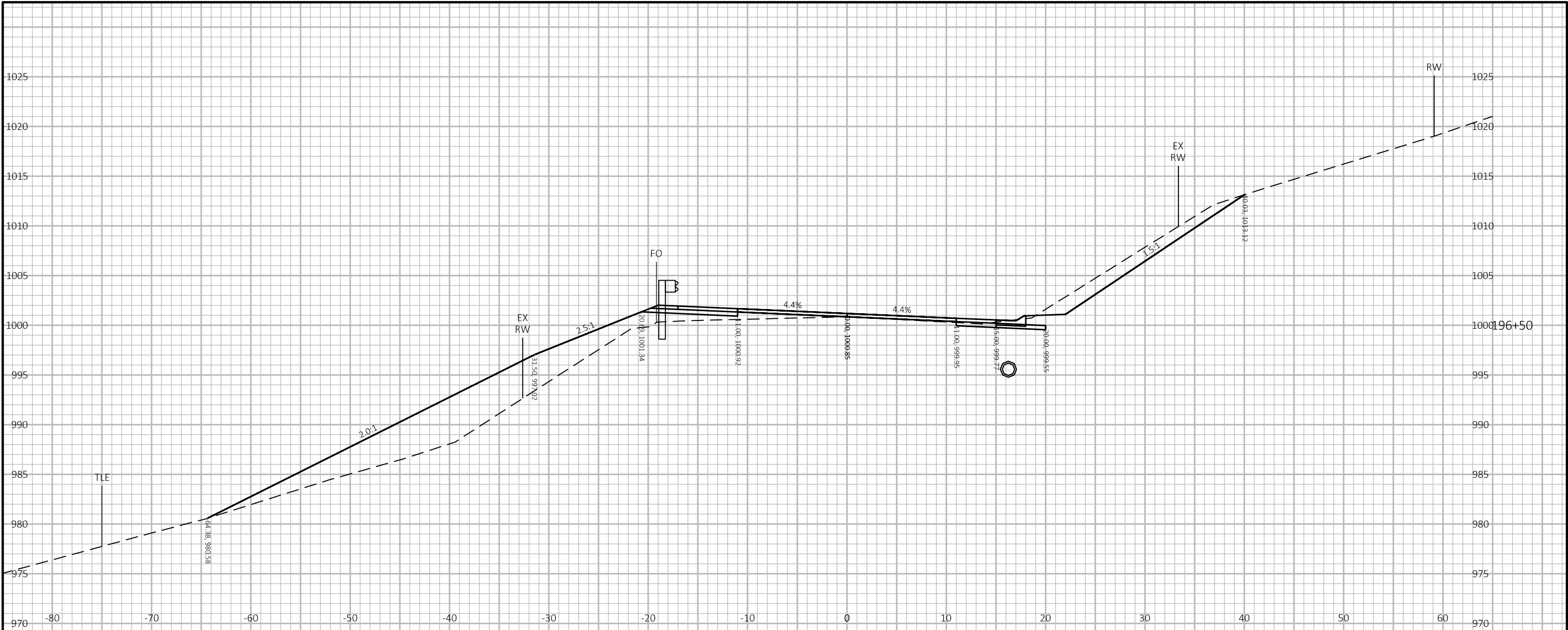
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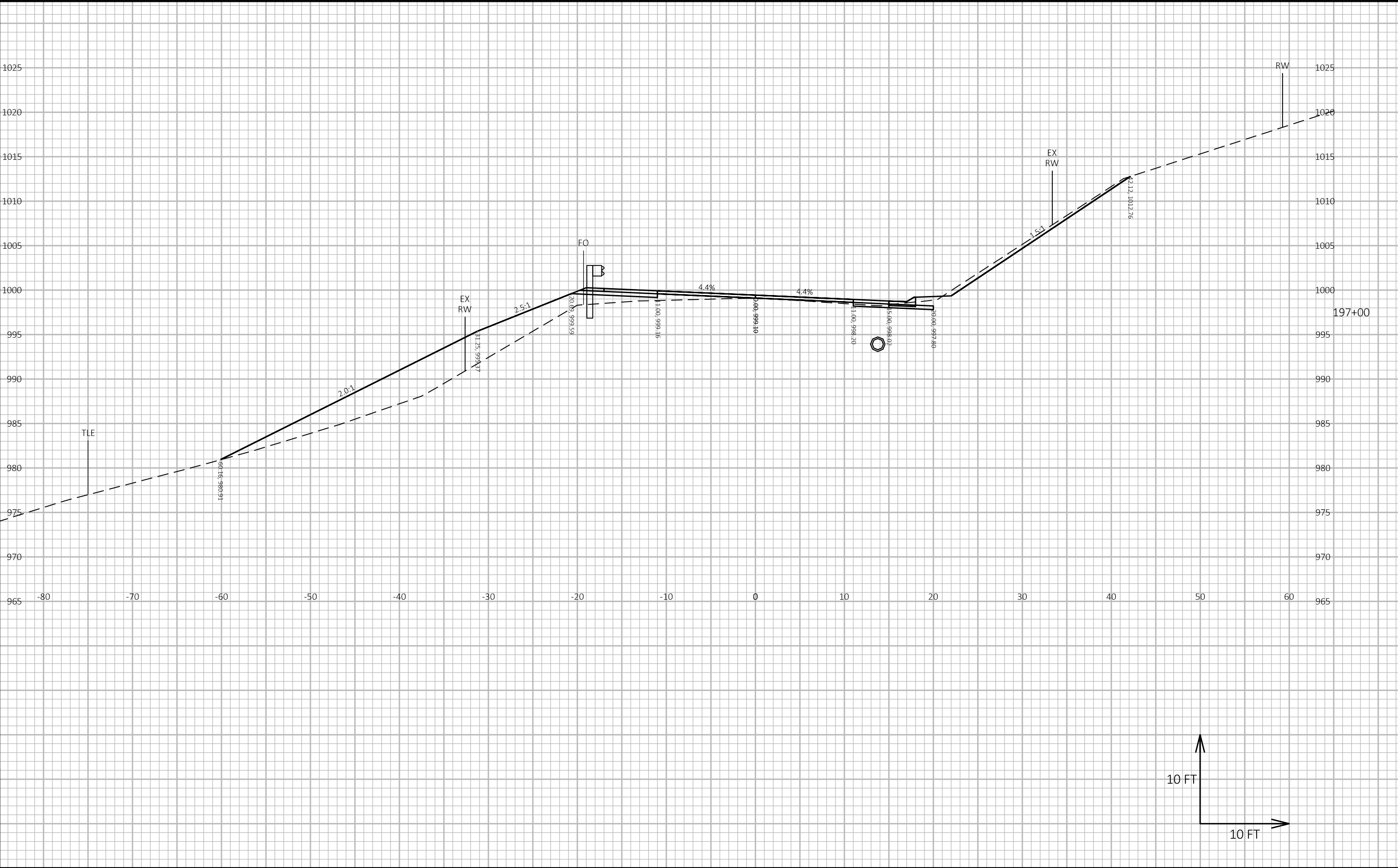
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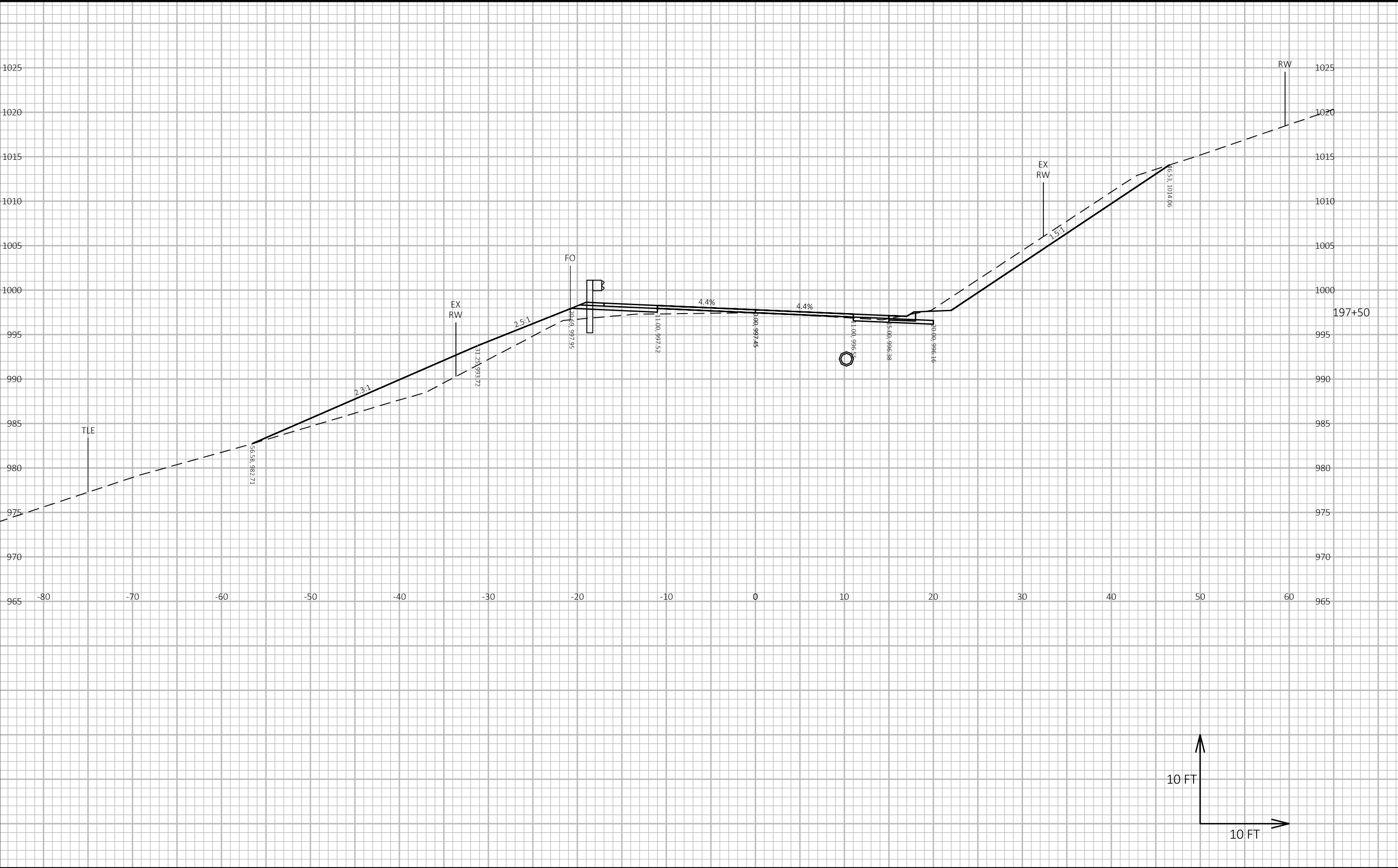


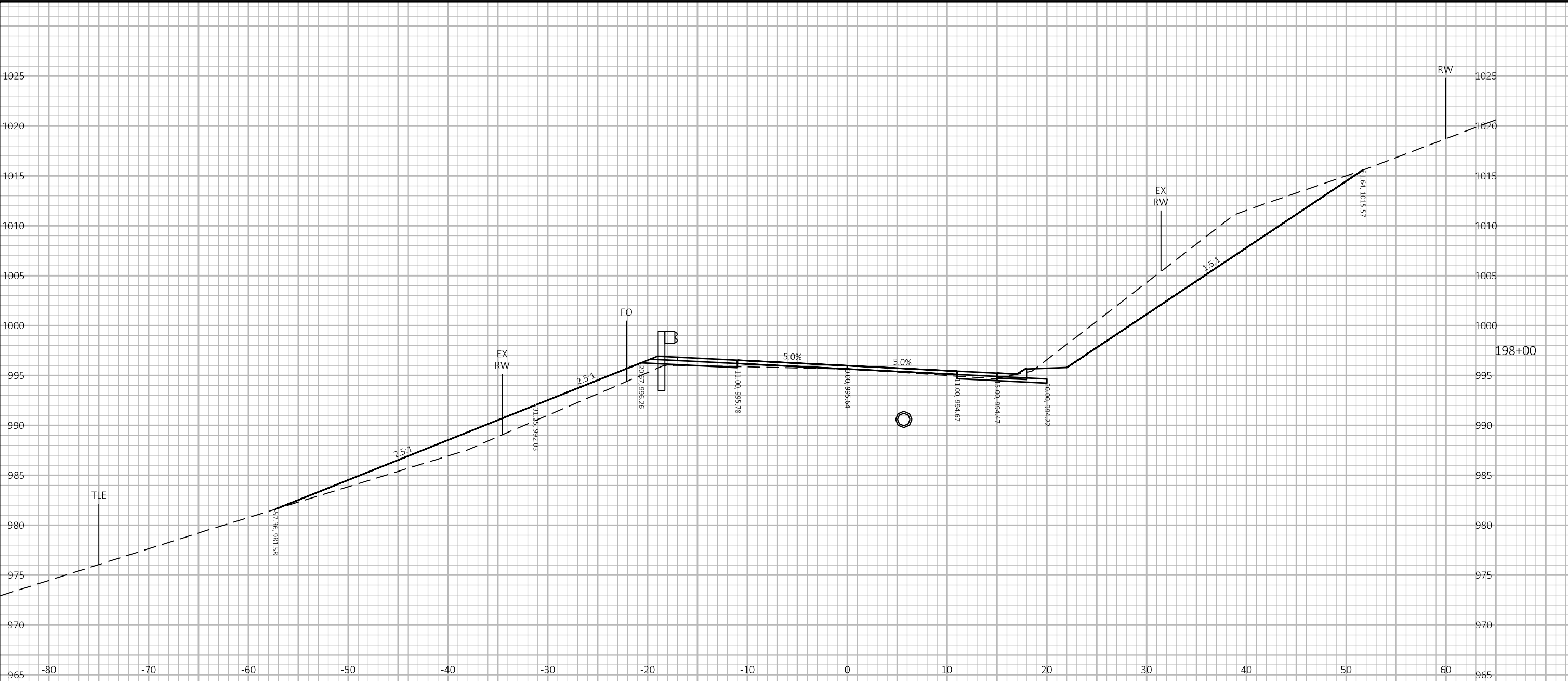
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PROJECT NO: 7881-05-73	HWY: CTH D	COUNTY: DUNN	CROSS SECTIONS: CTH D	SHEET 199	E
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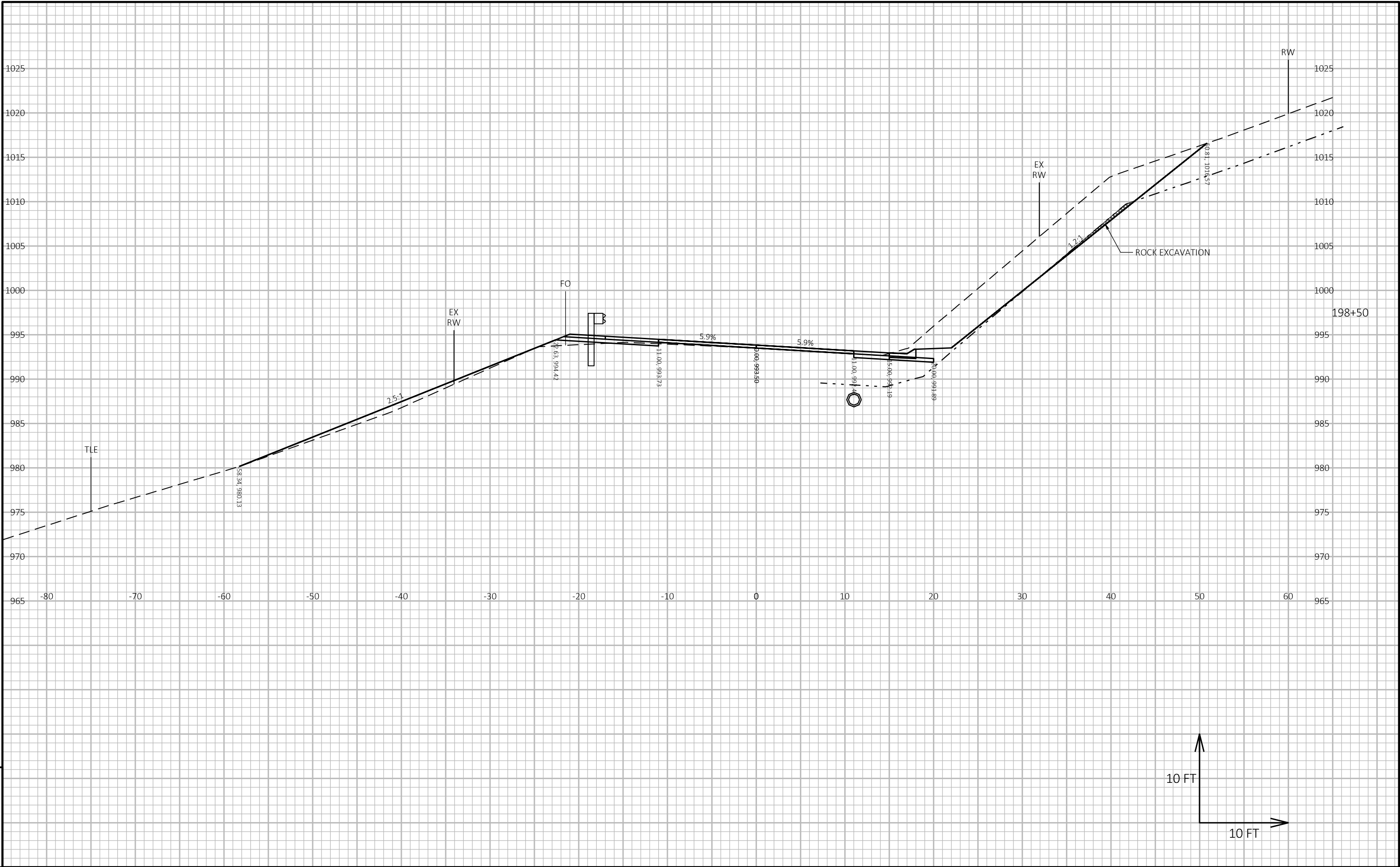






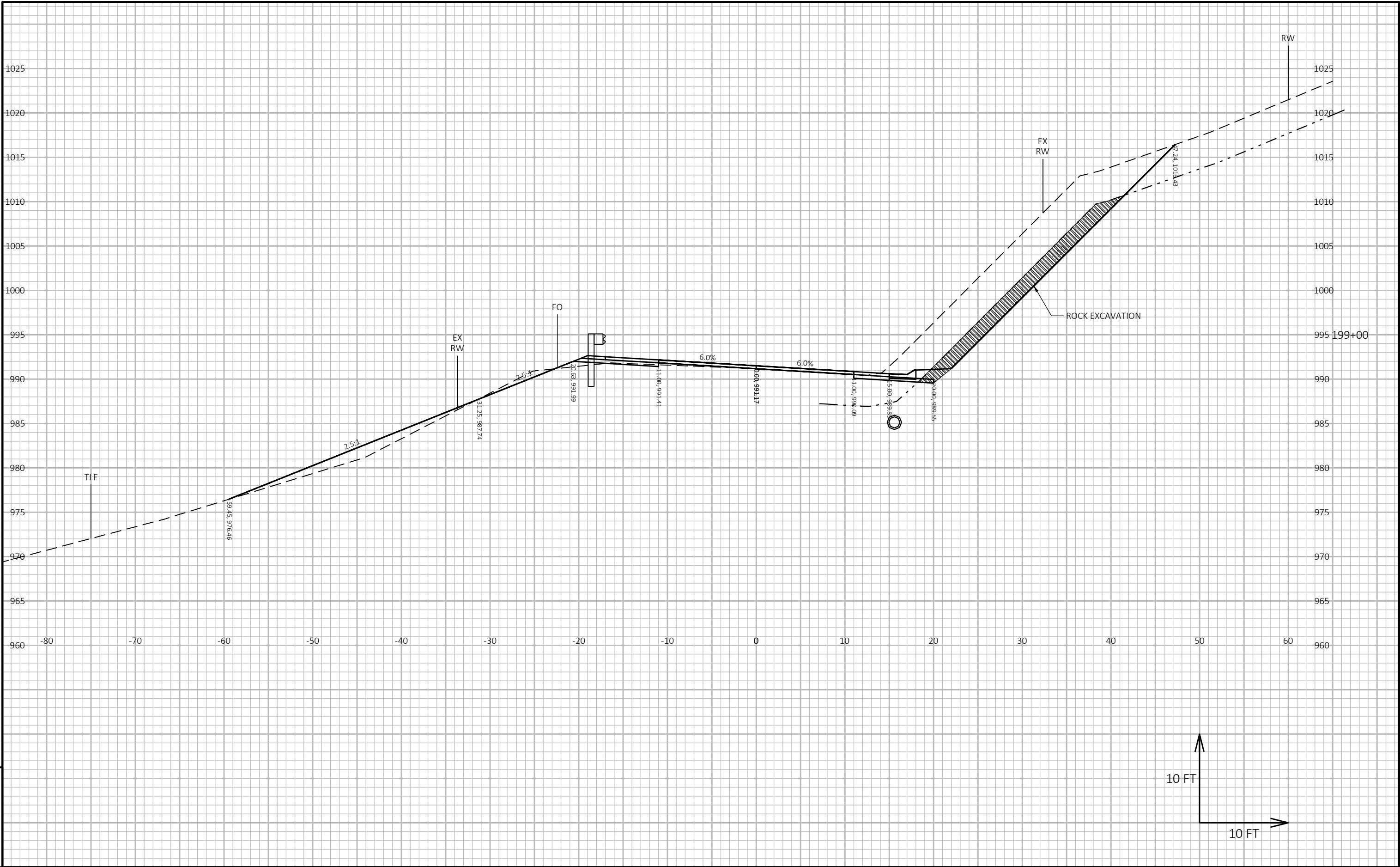
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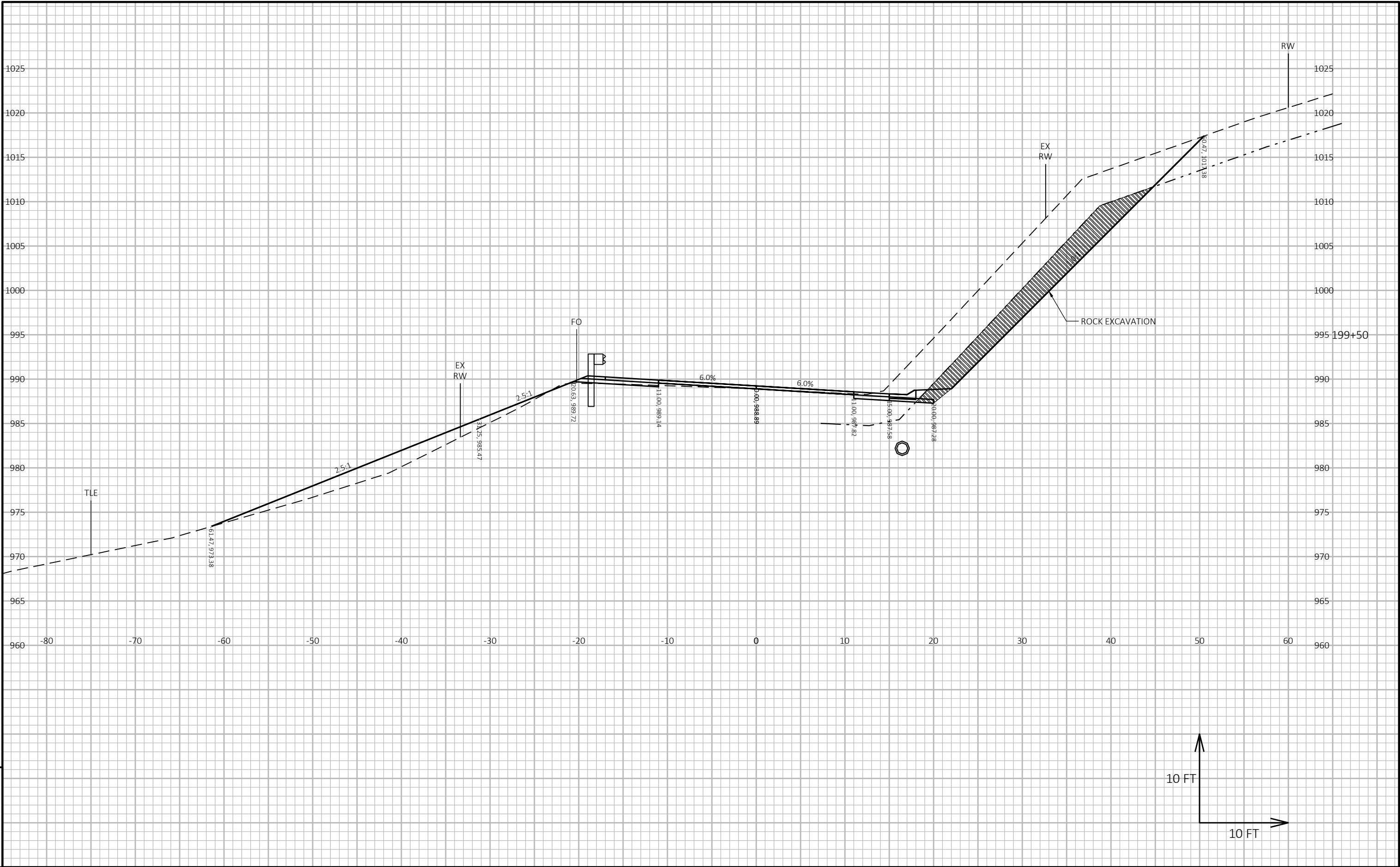
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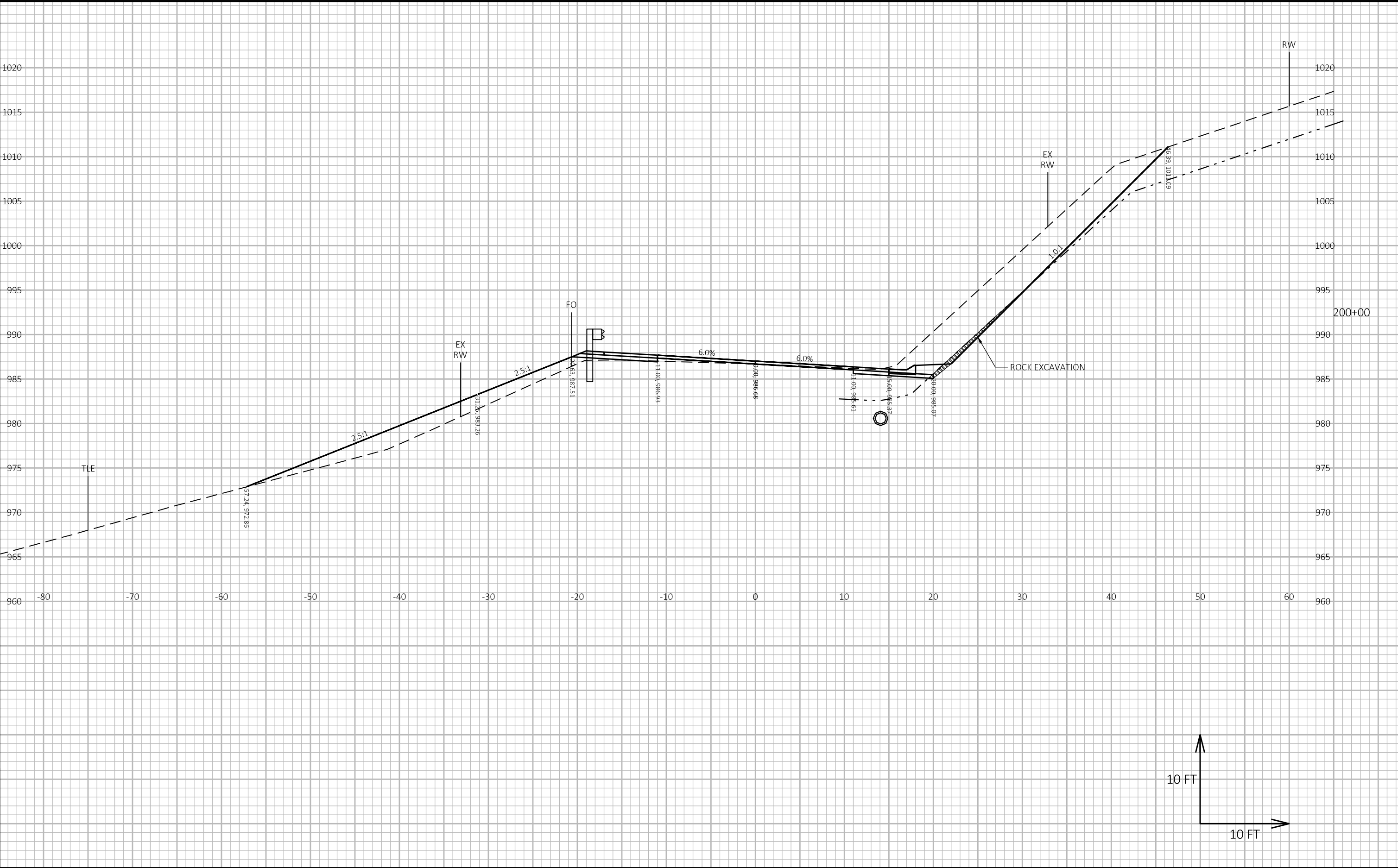
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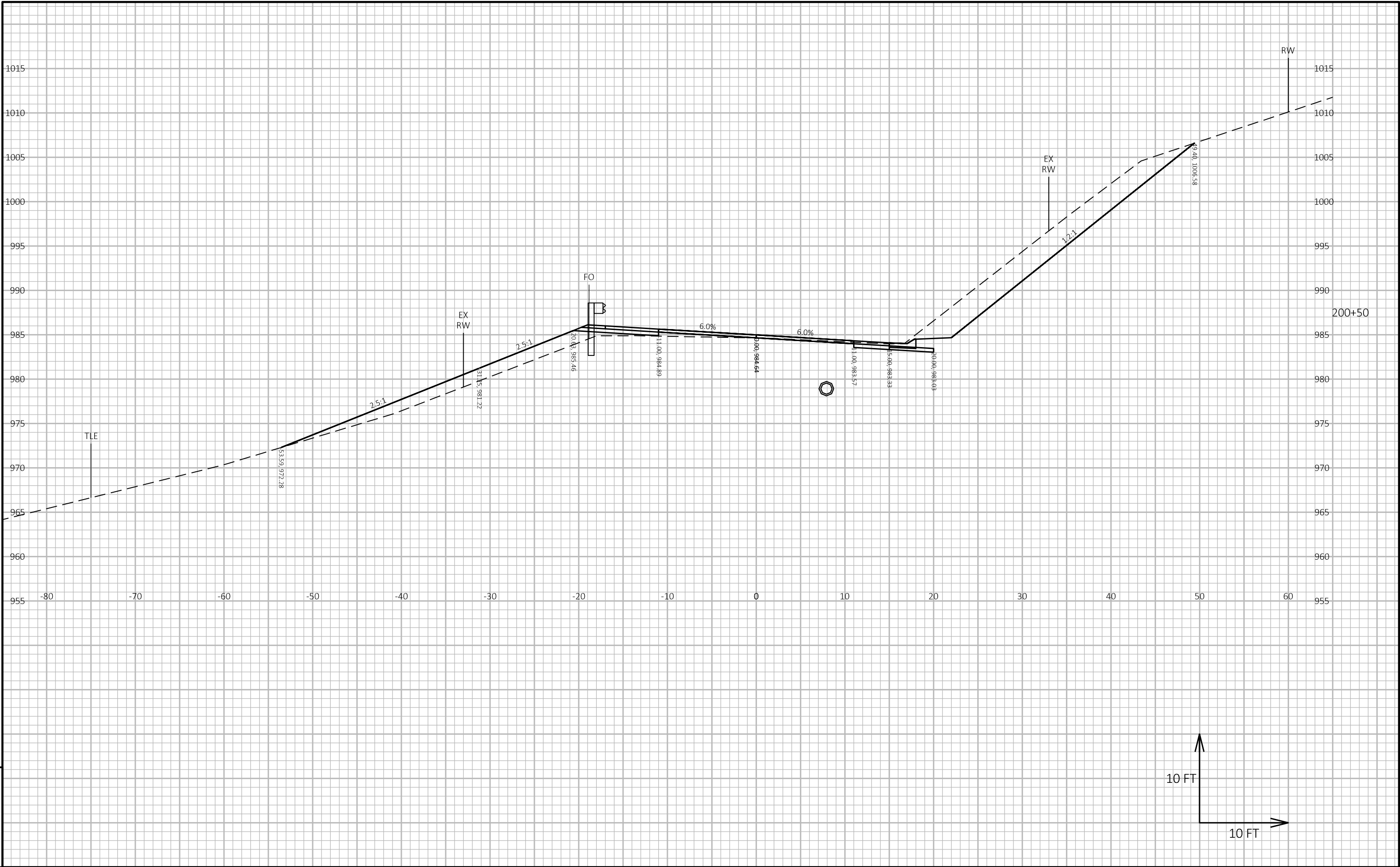




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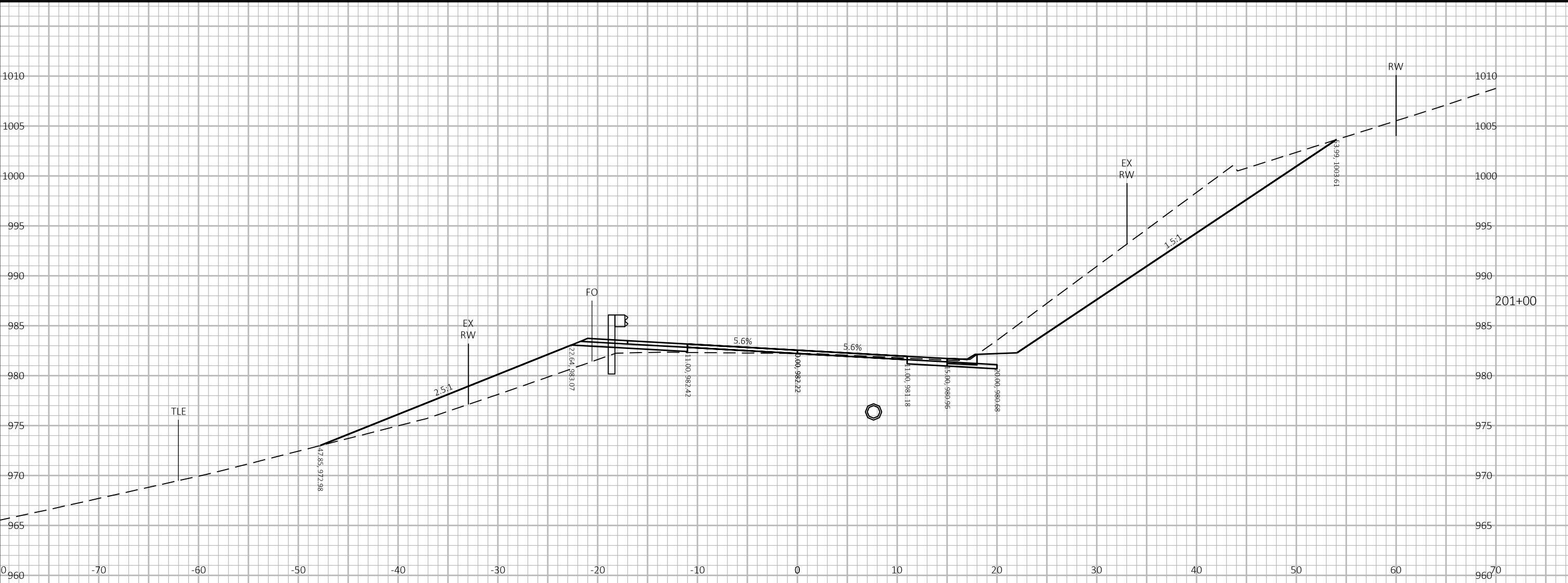
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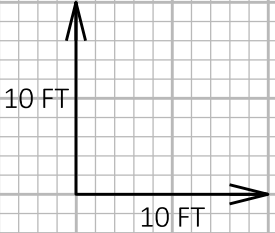
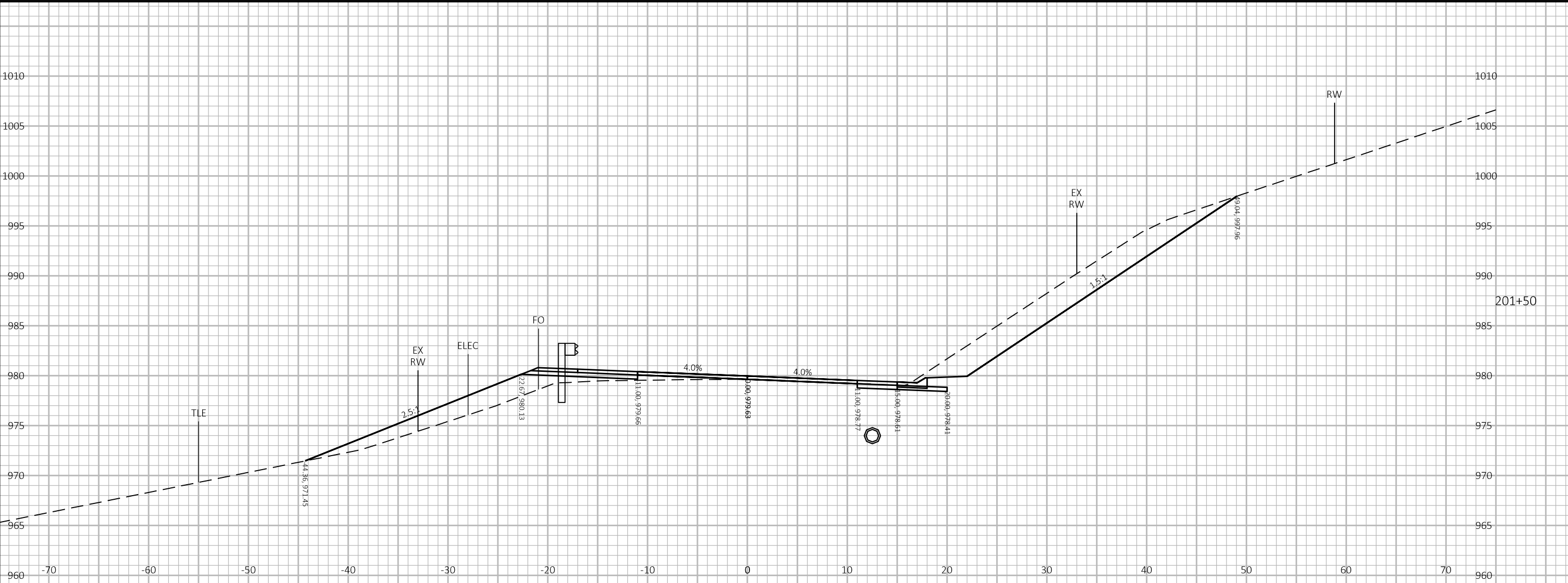
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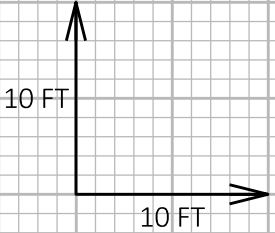
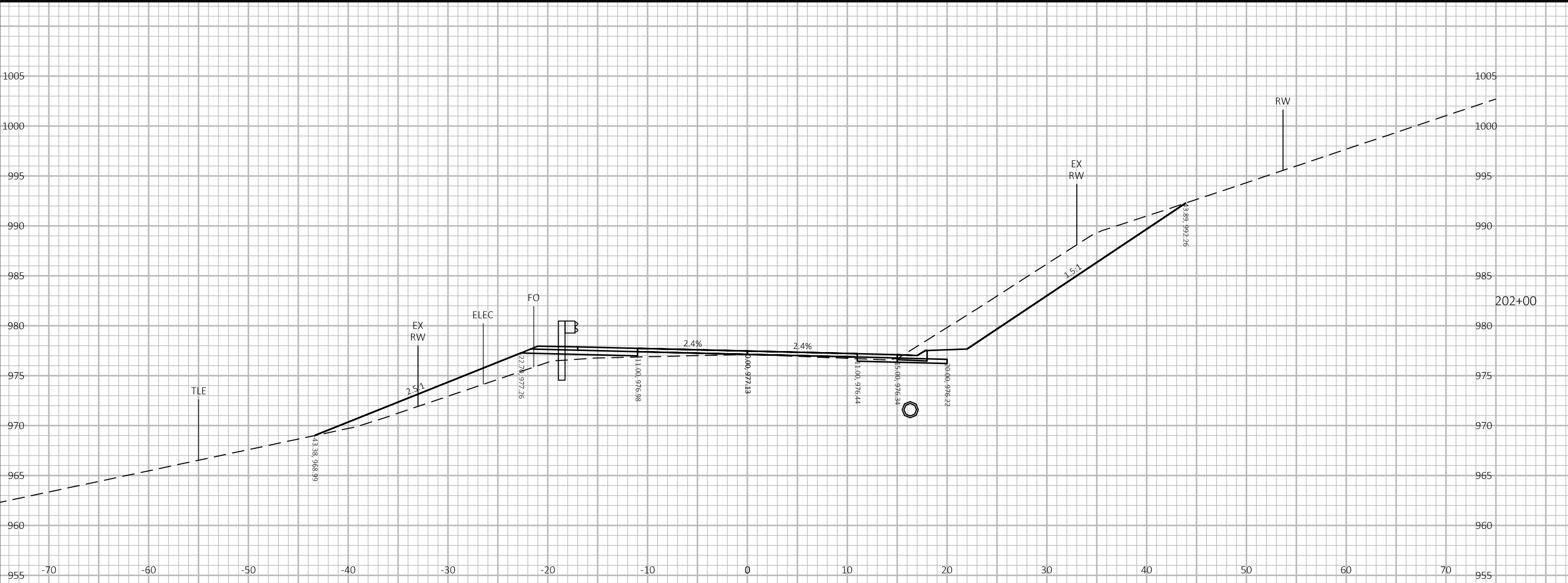
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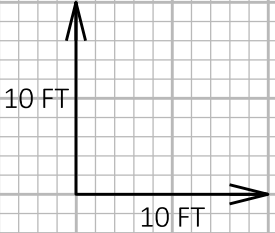
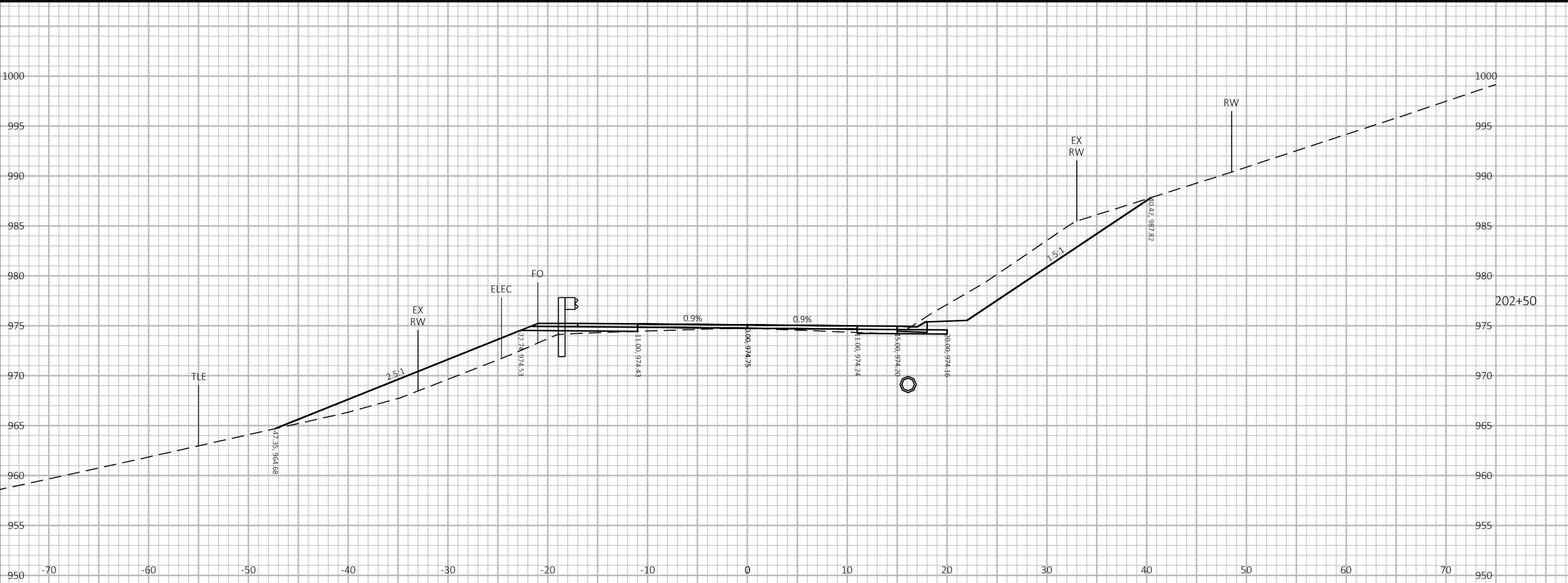


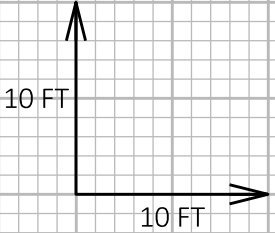
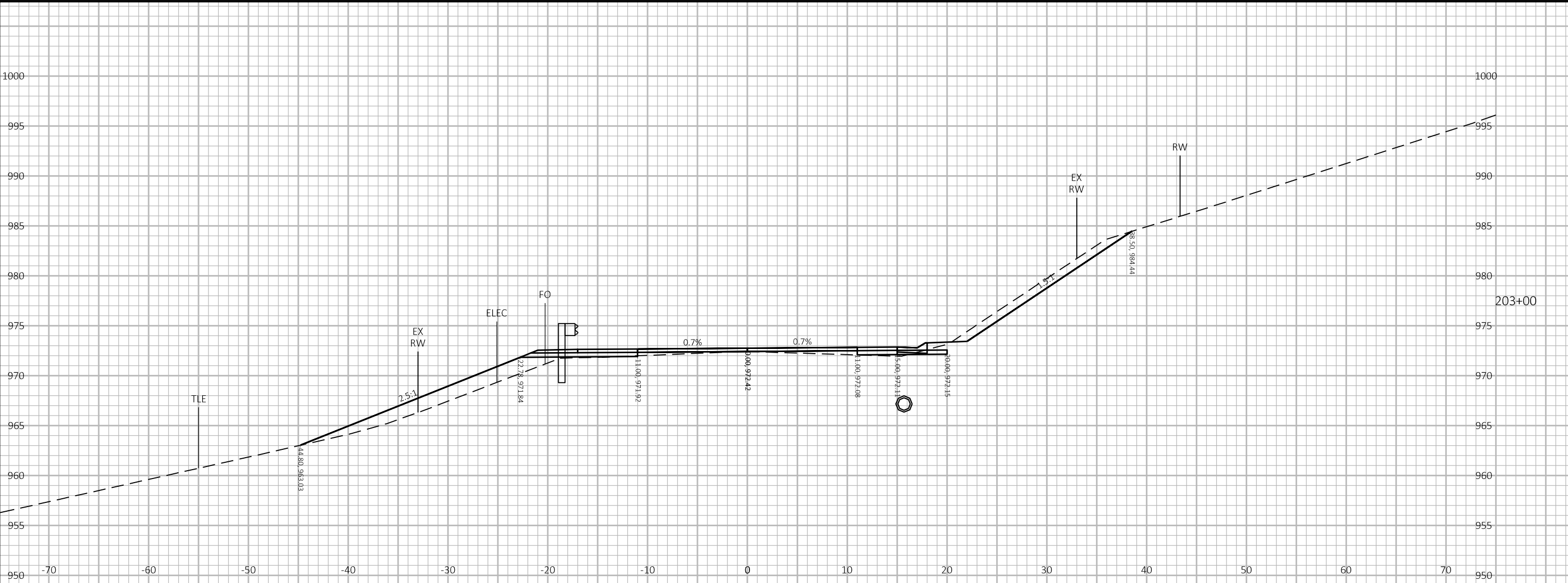
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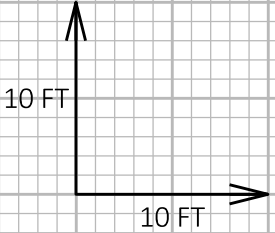
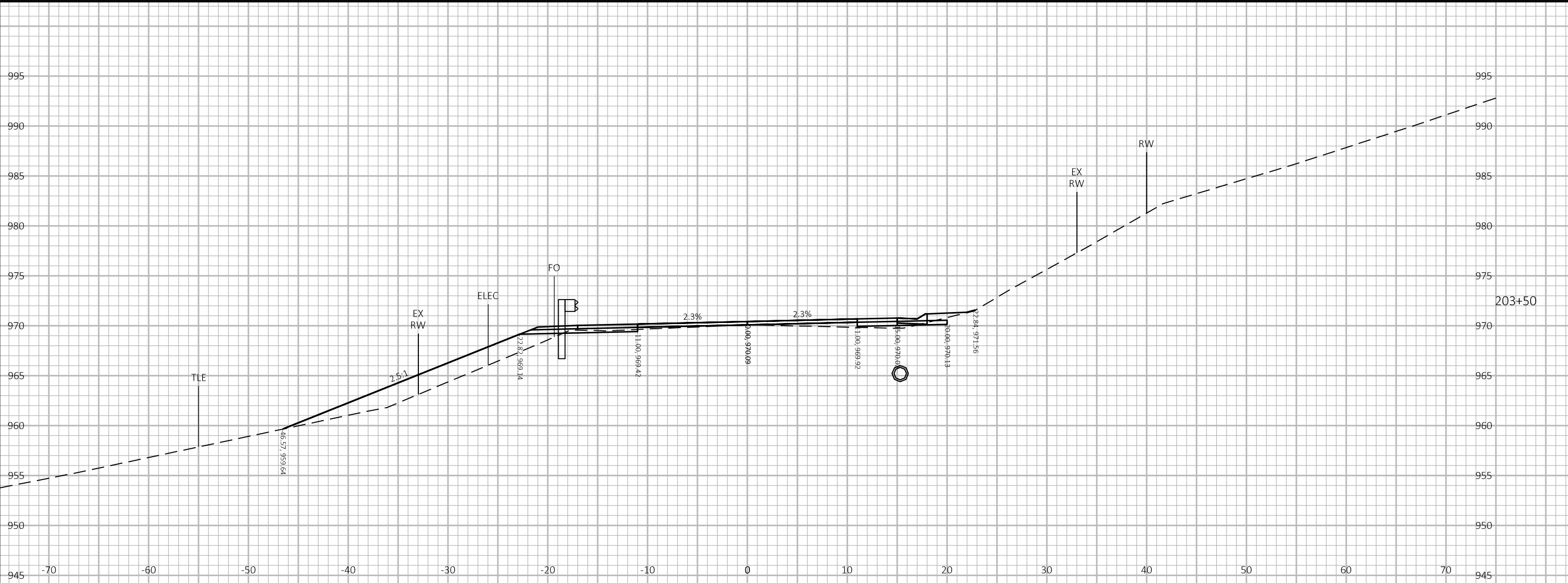


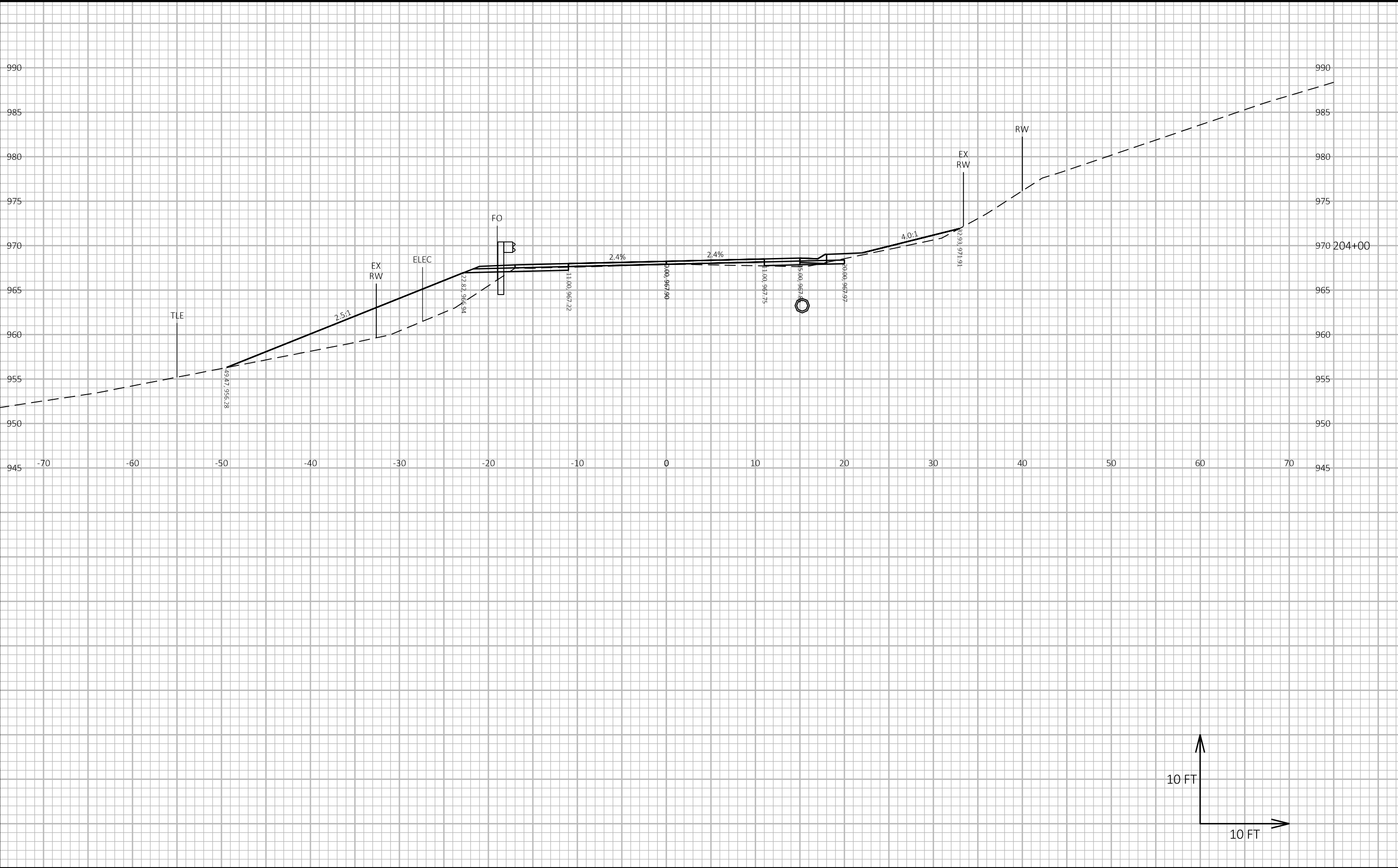


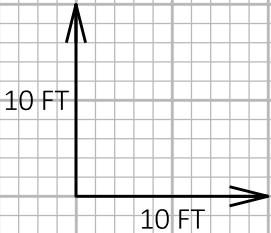
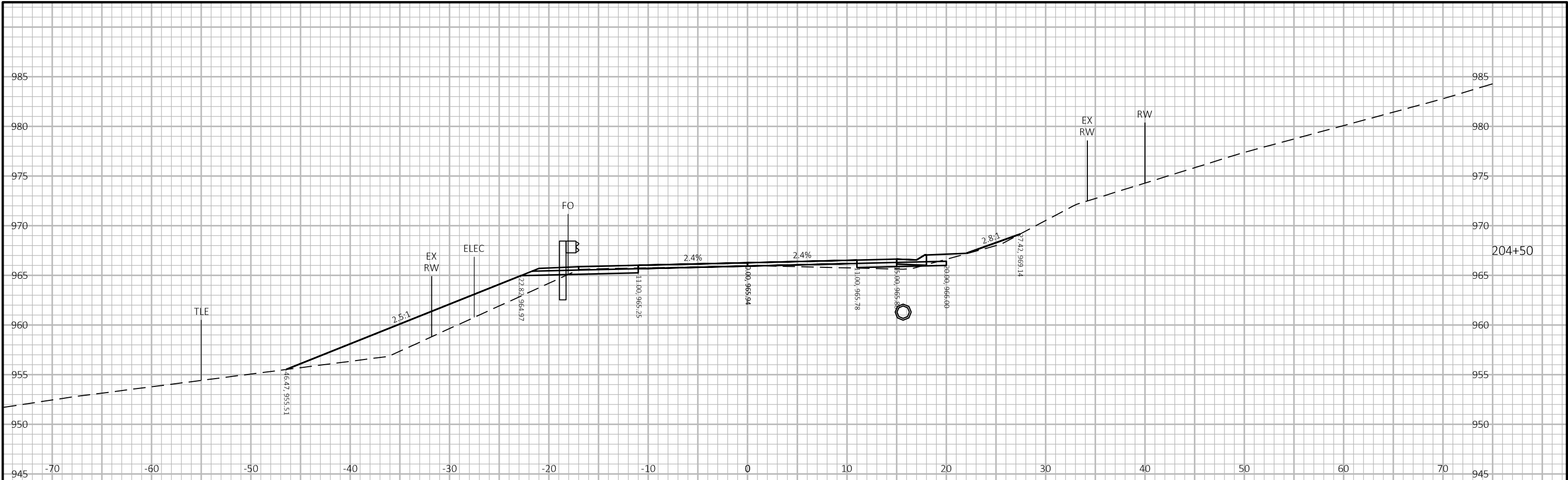


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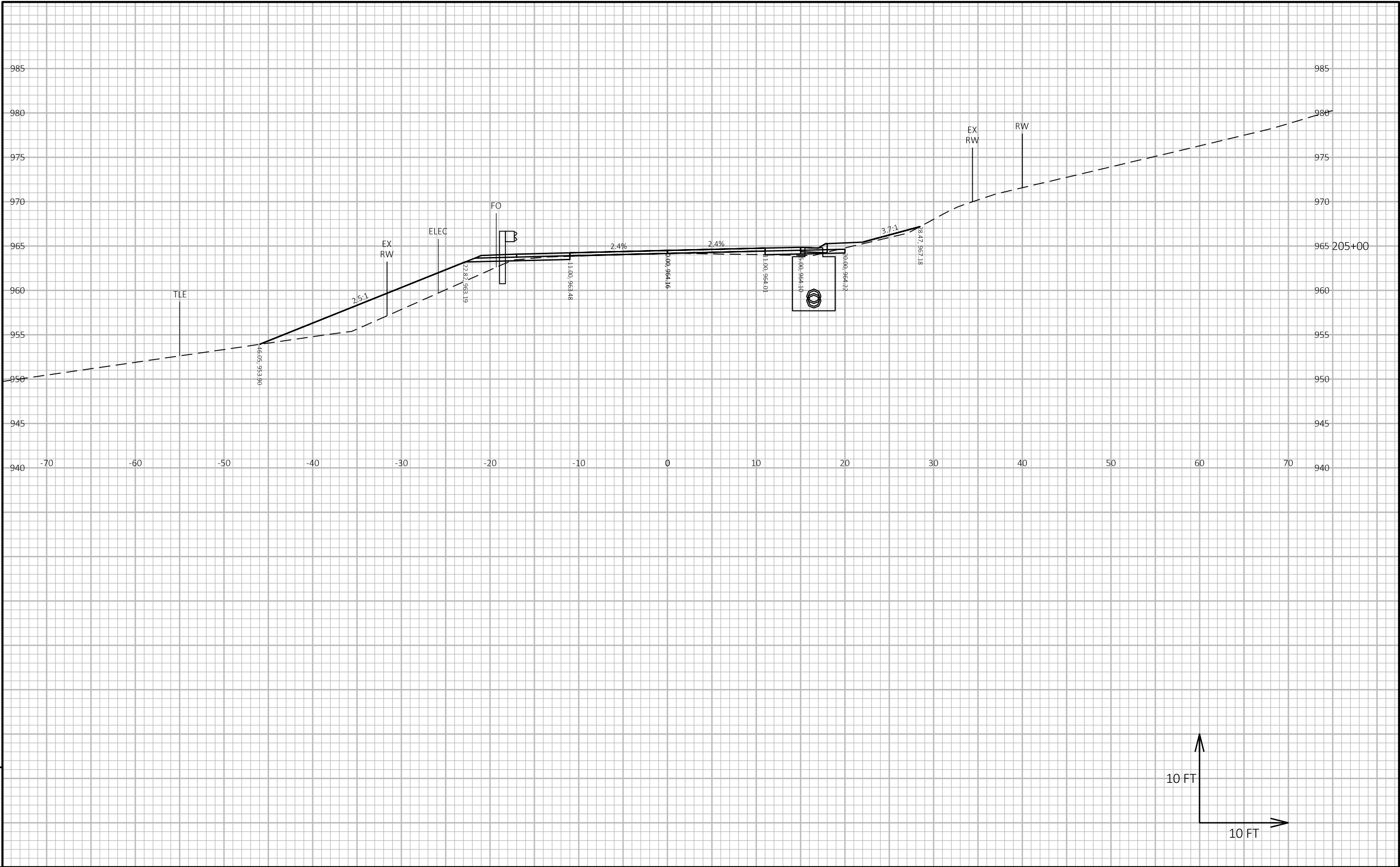


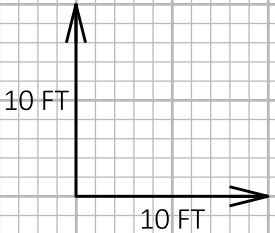
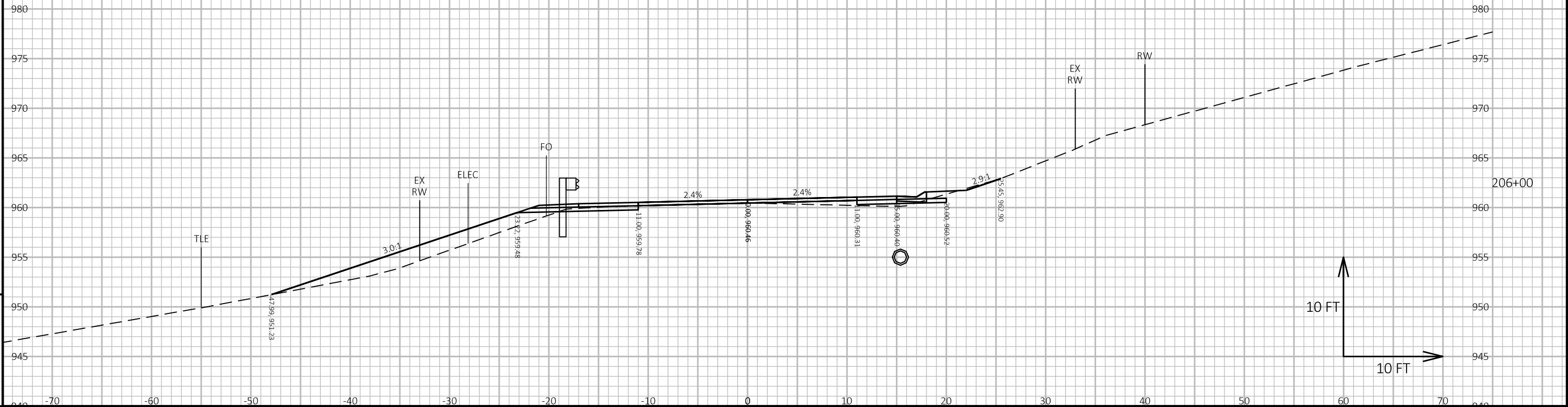
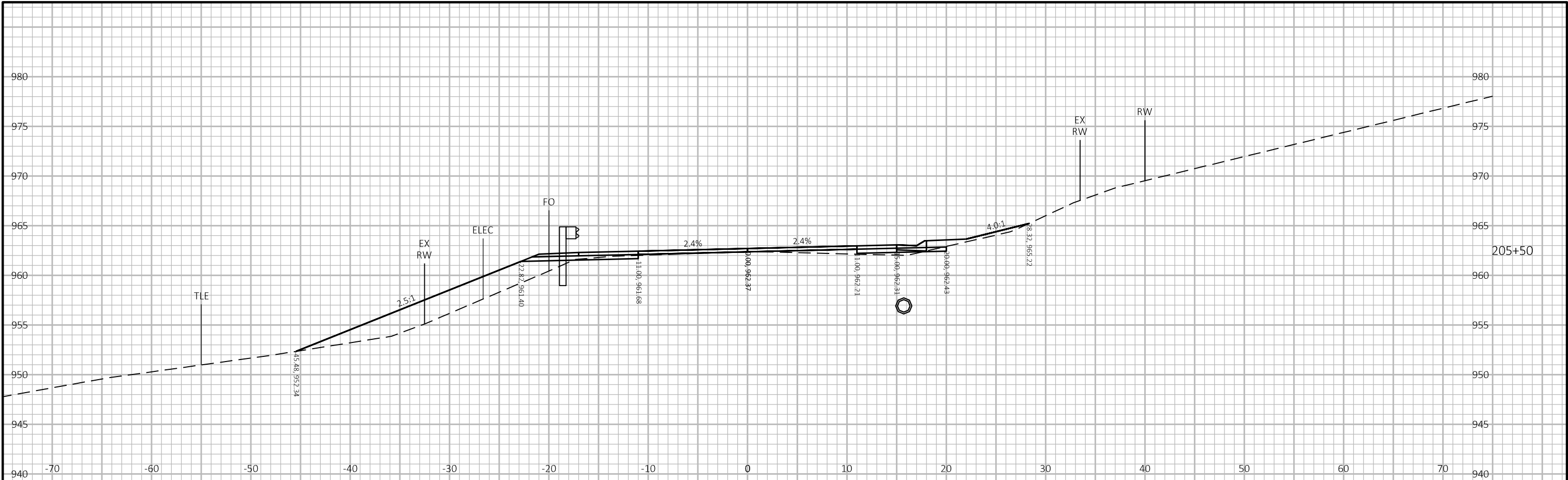


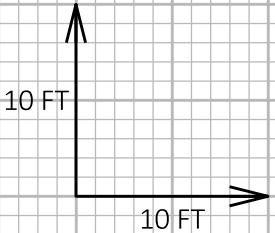
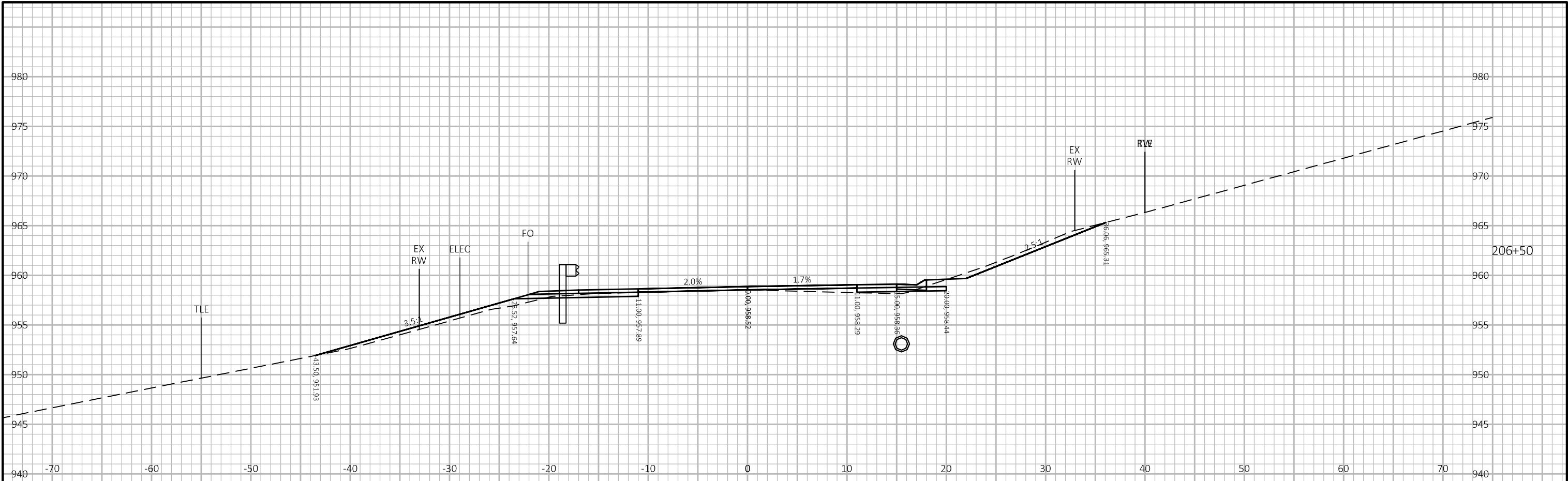


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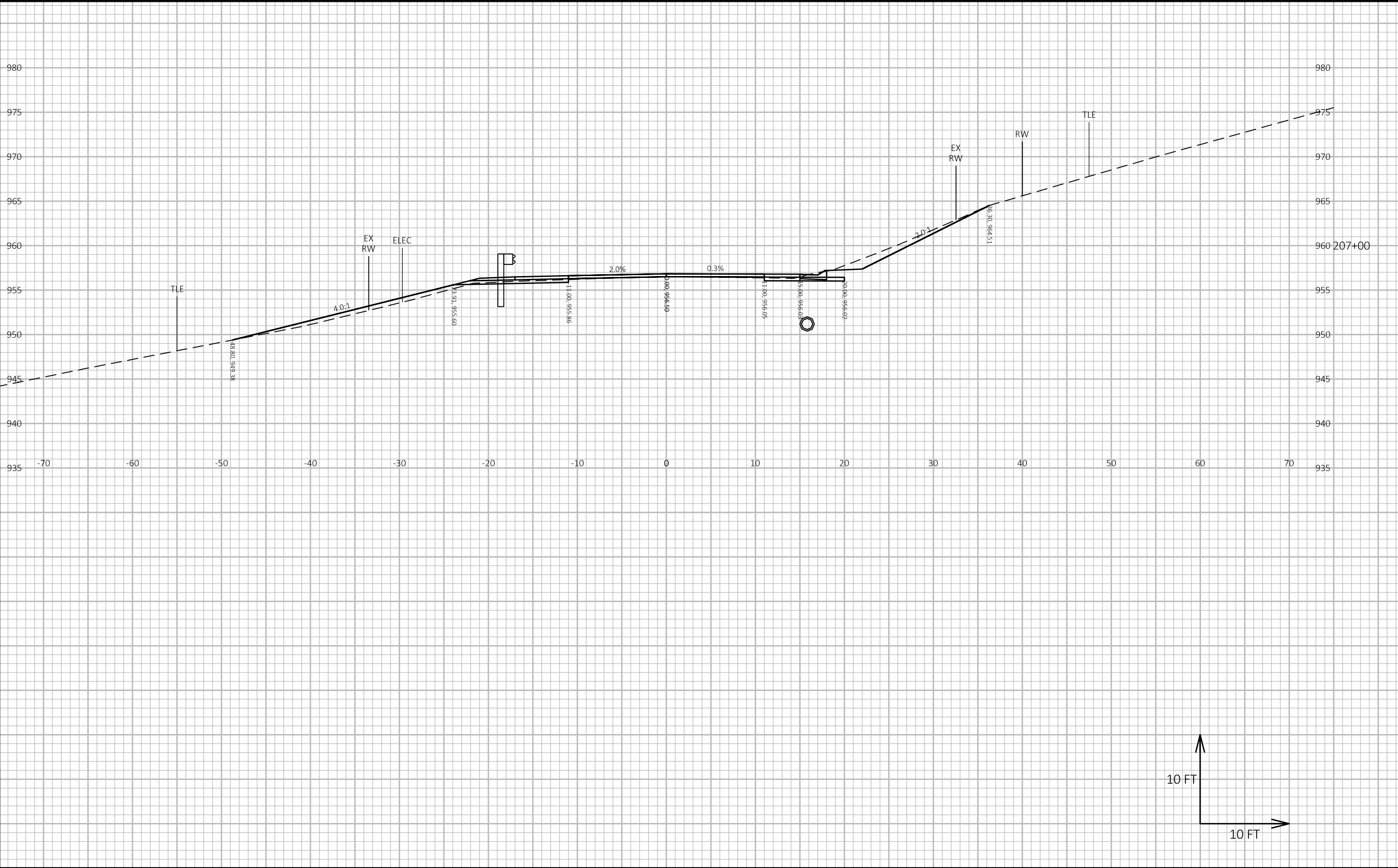






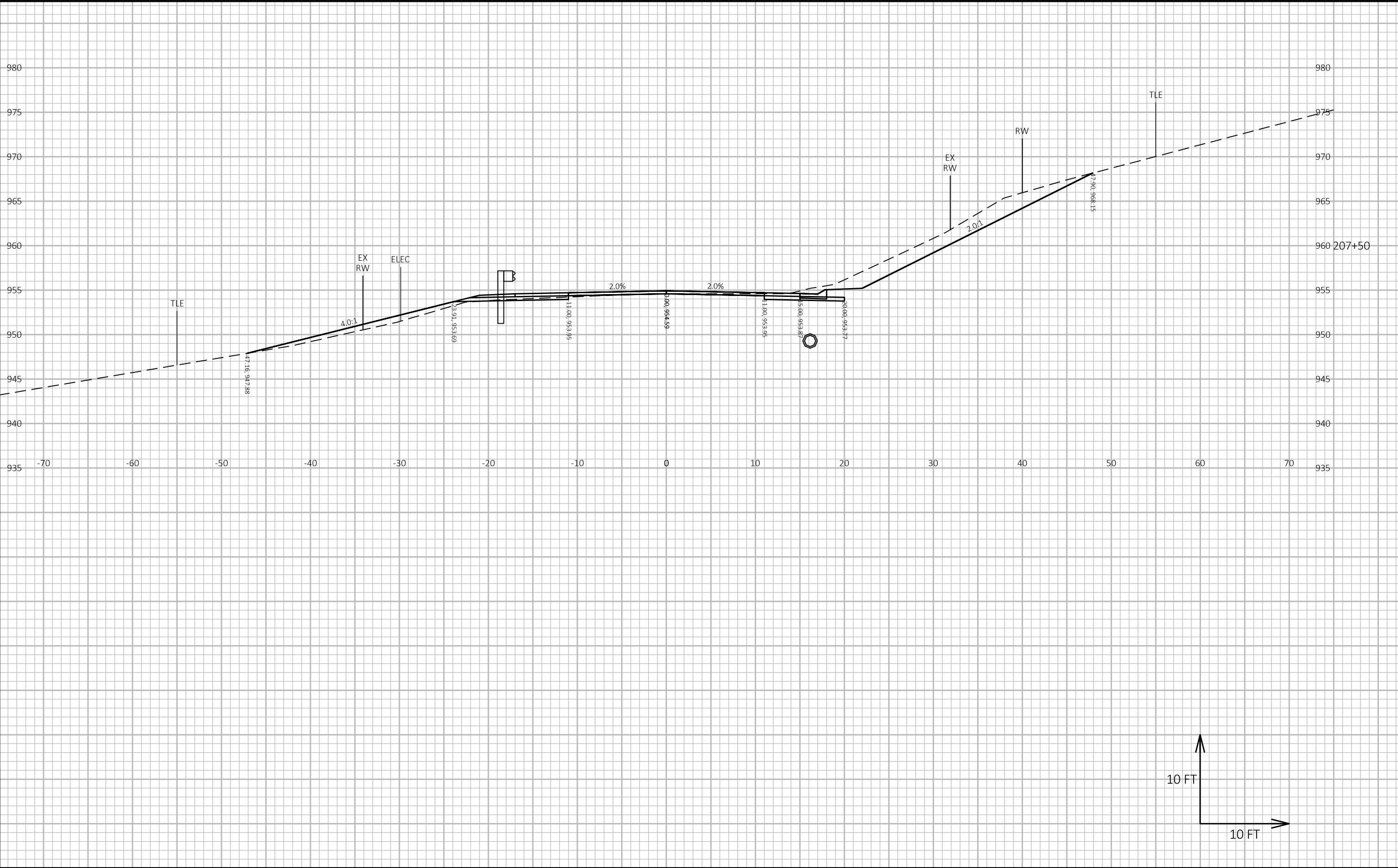
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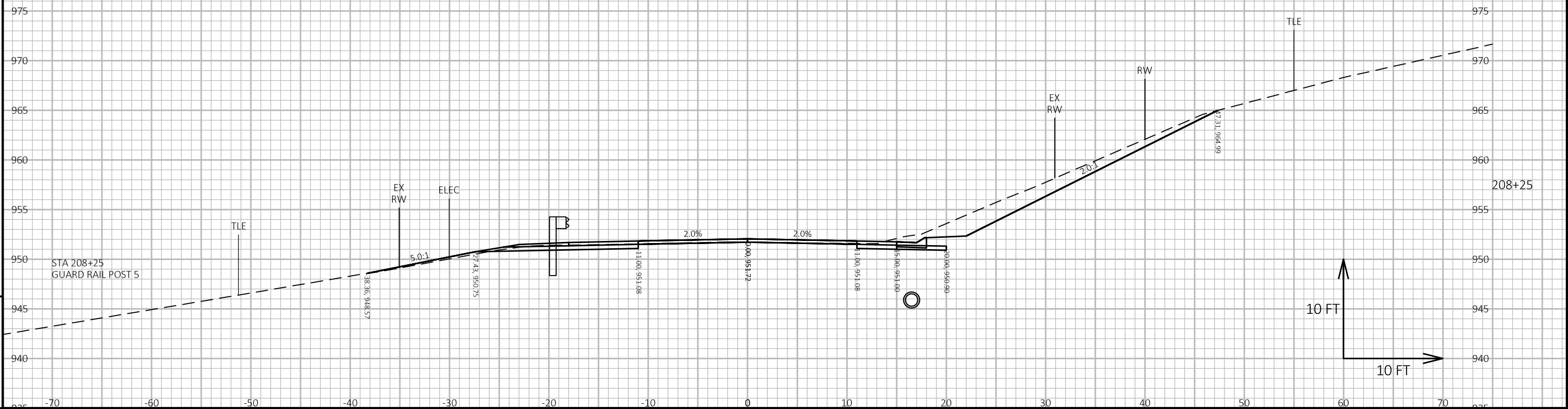
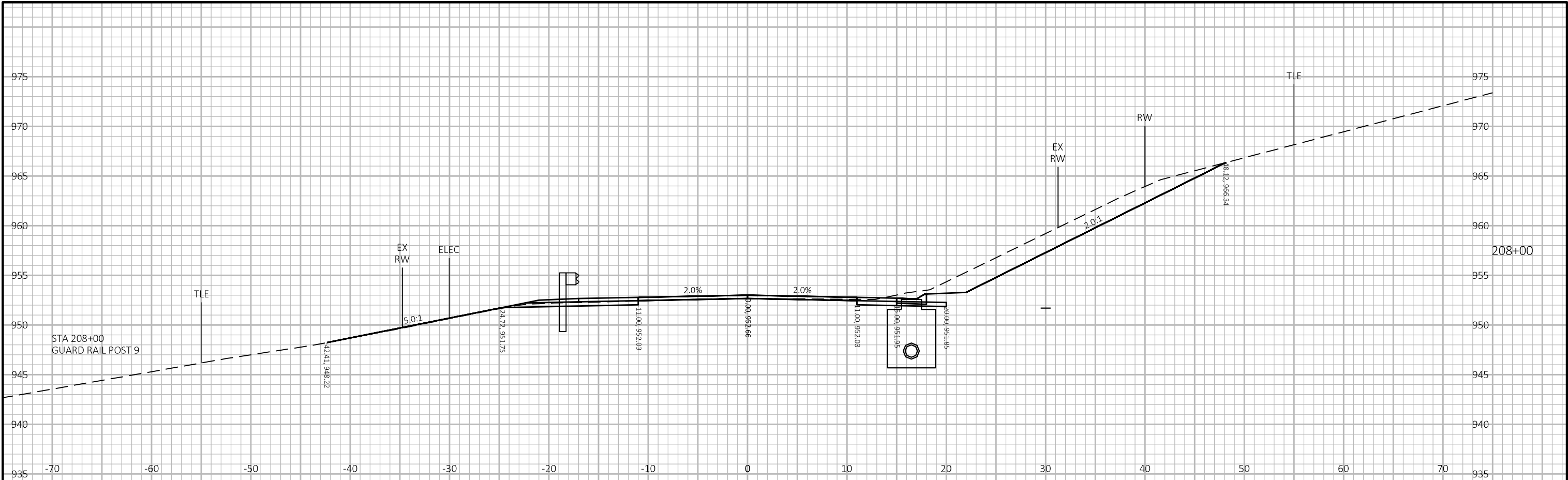
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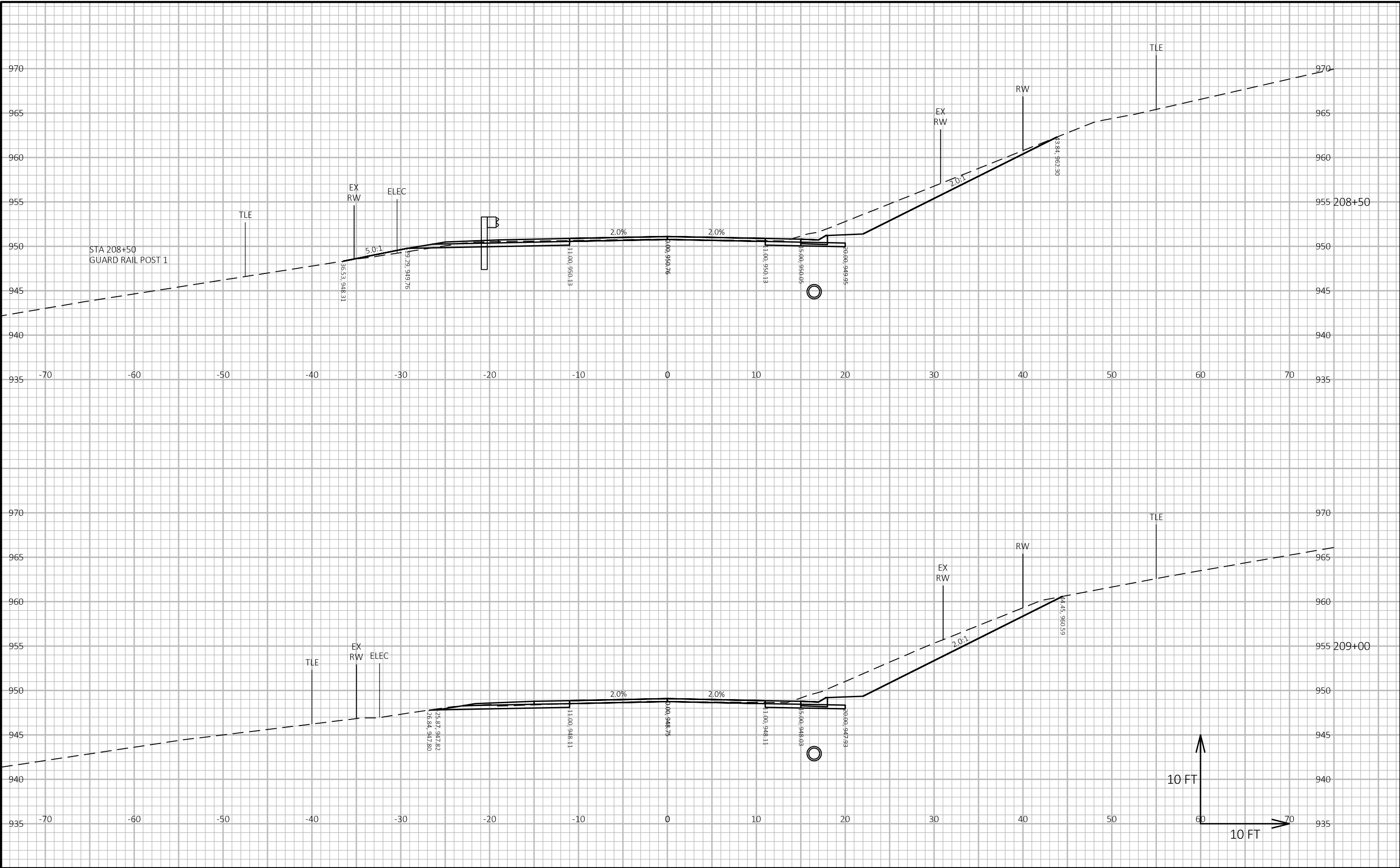


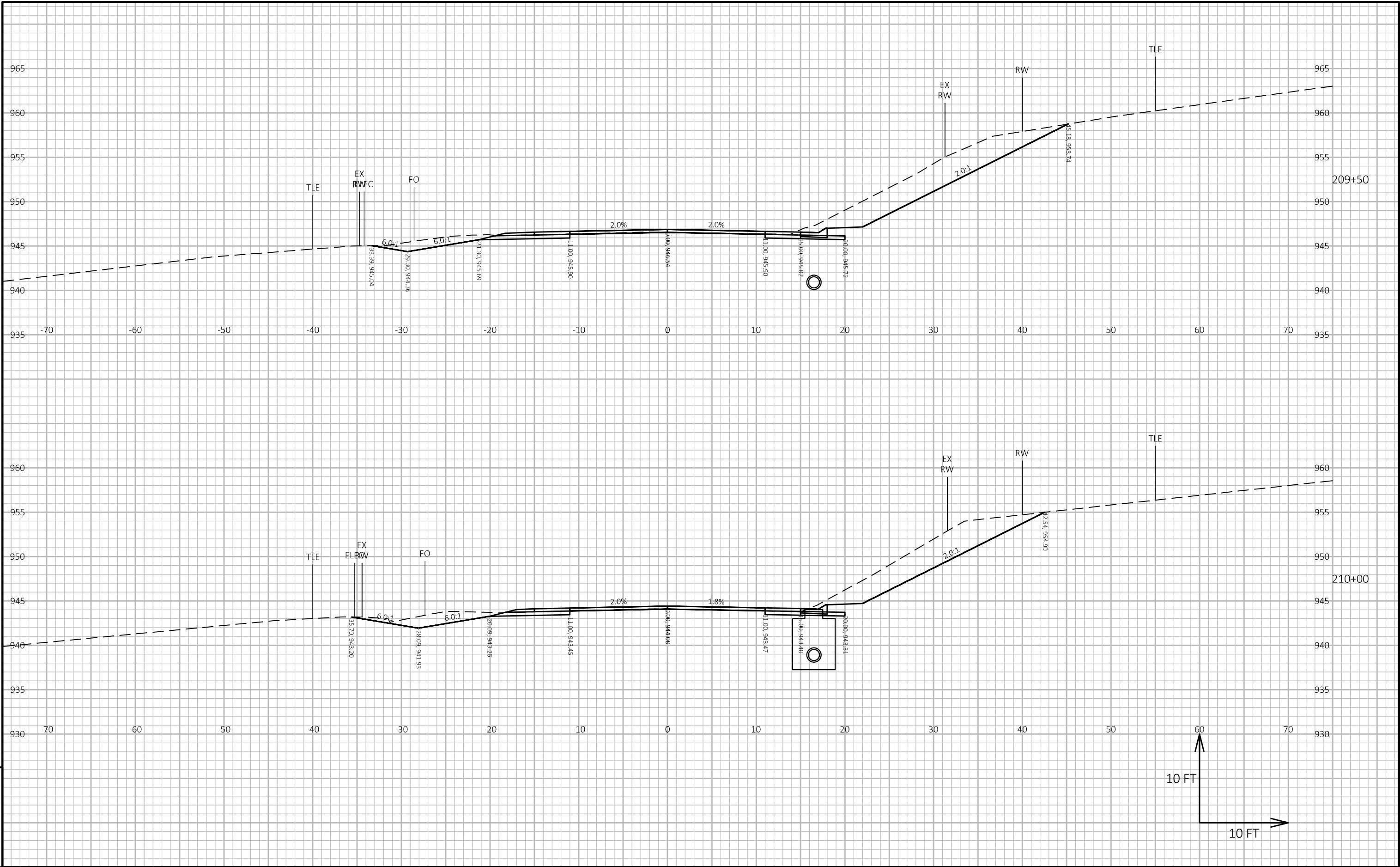
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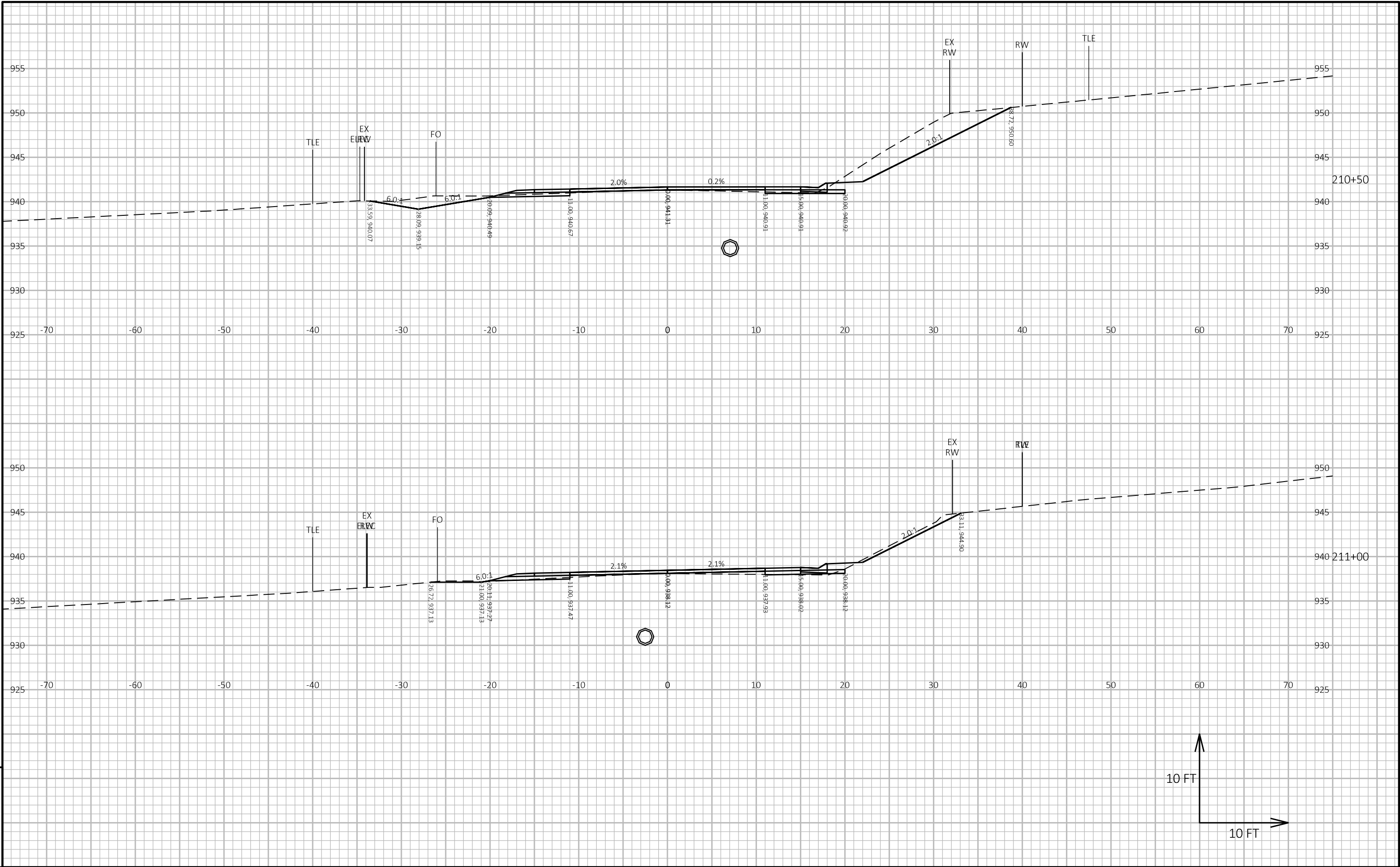
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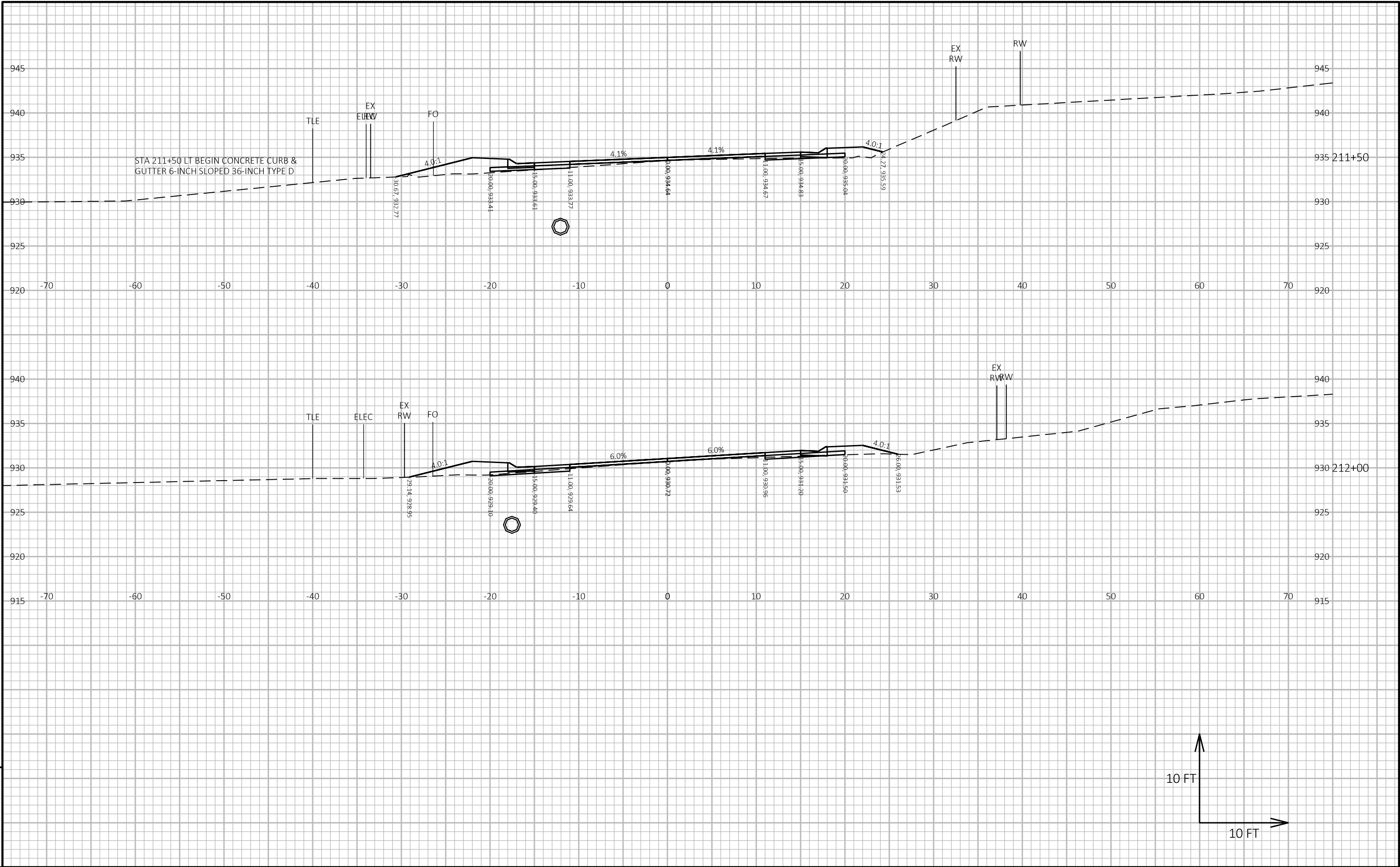
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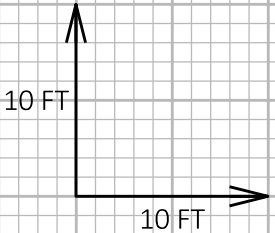
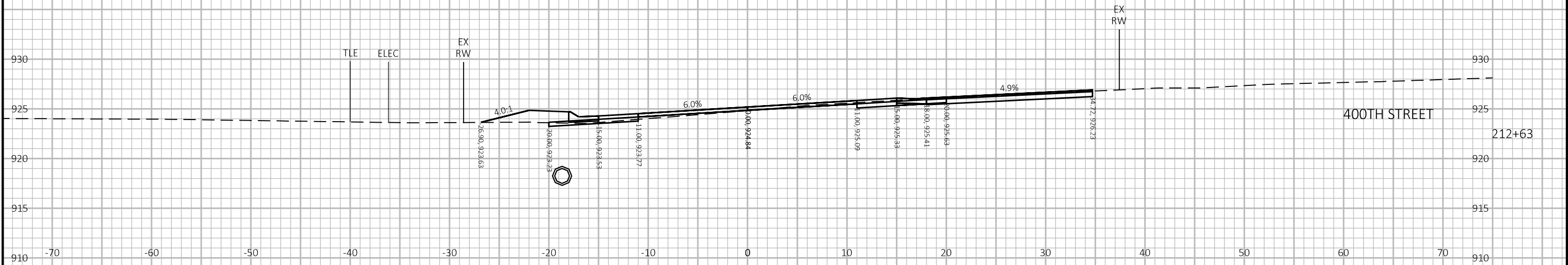
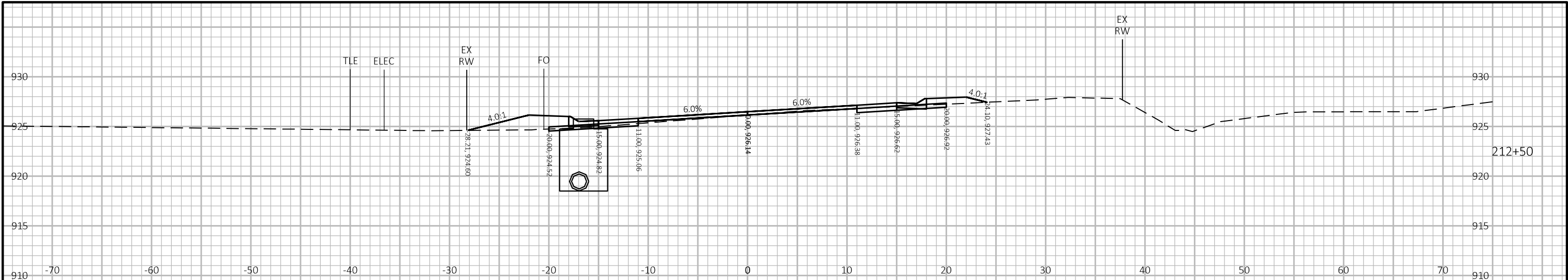


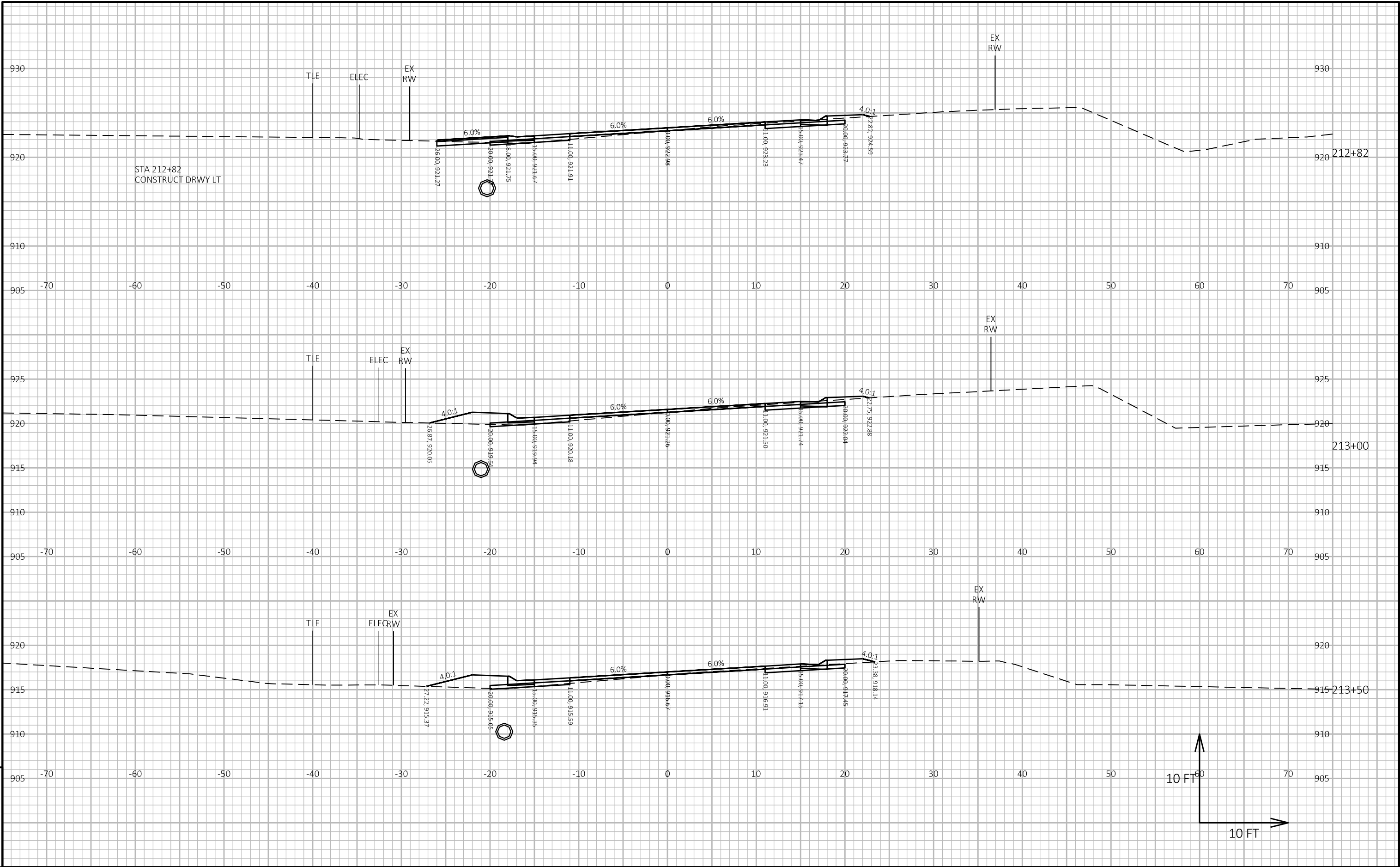


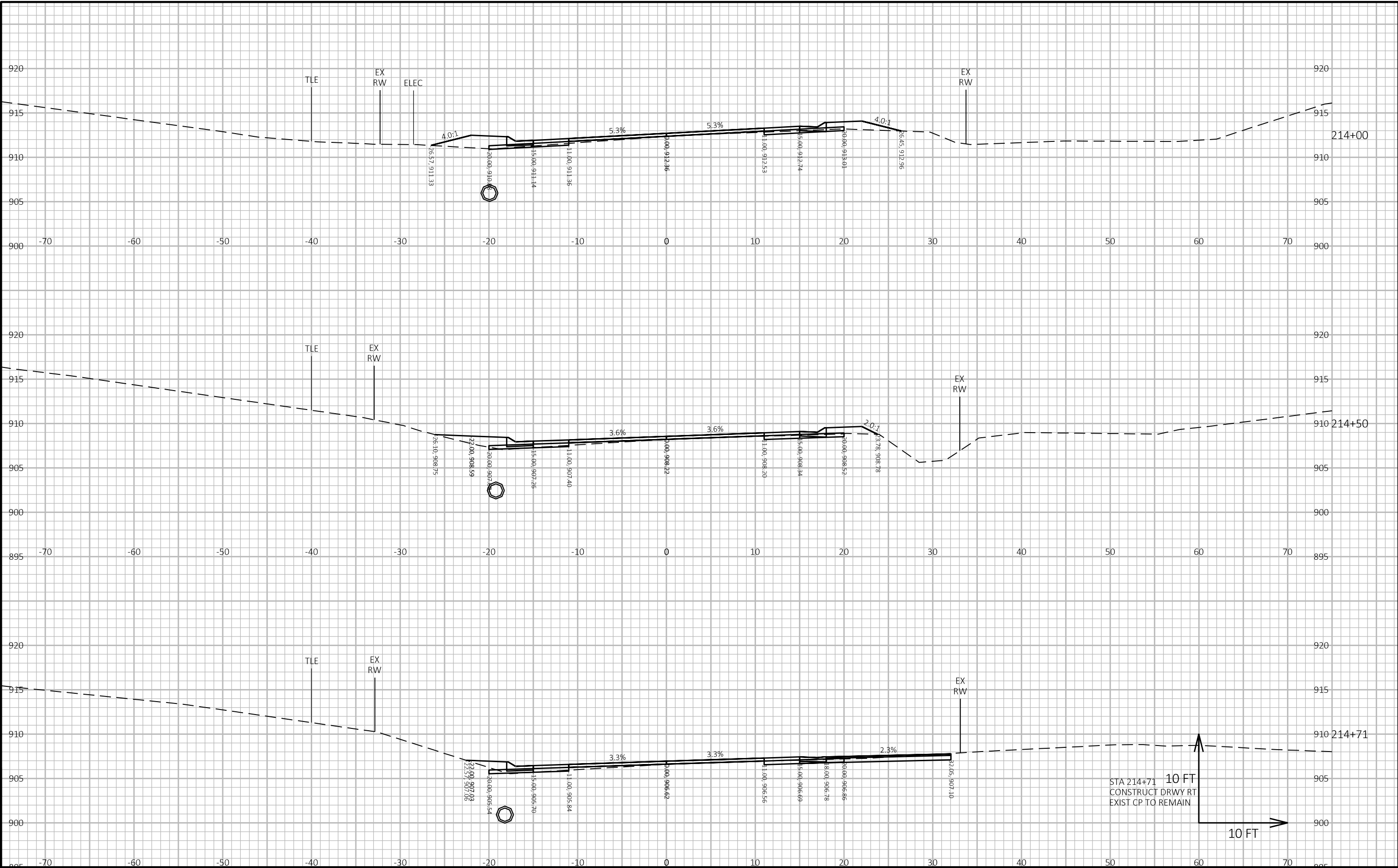


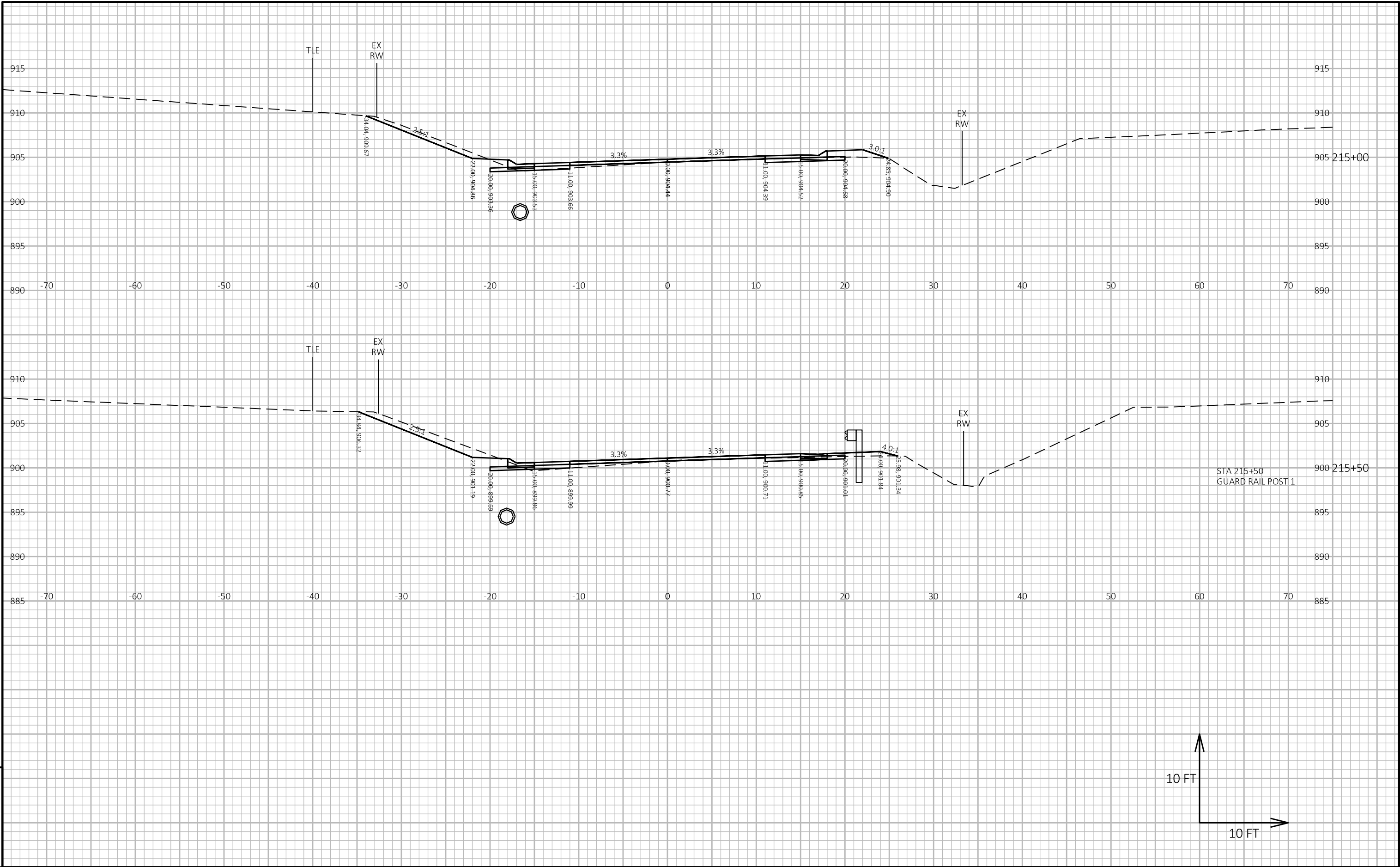


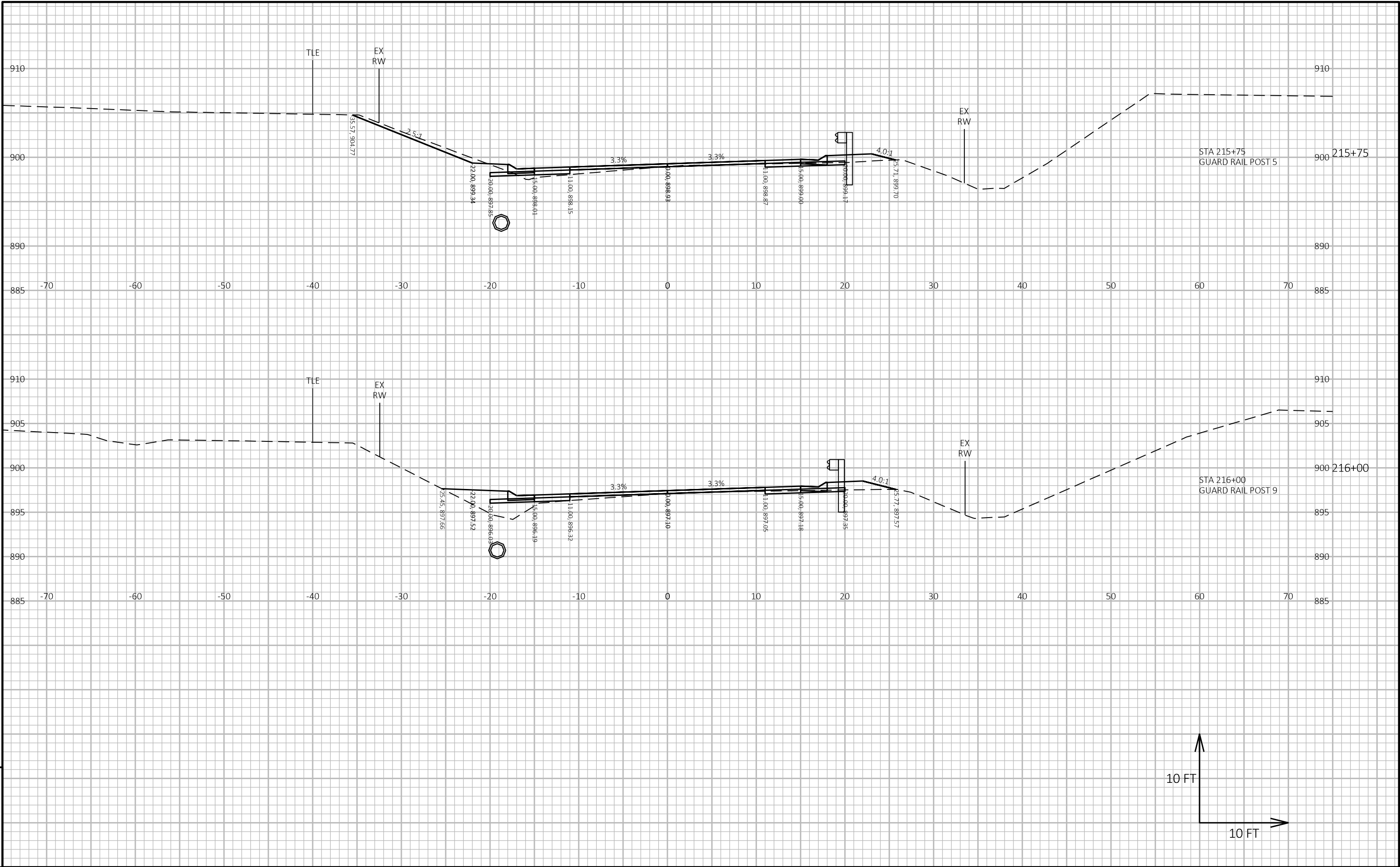


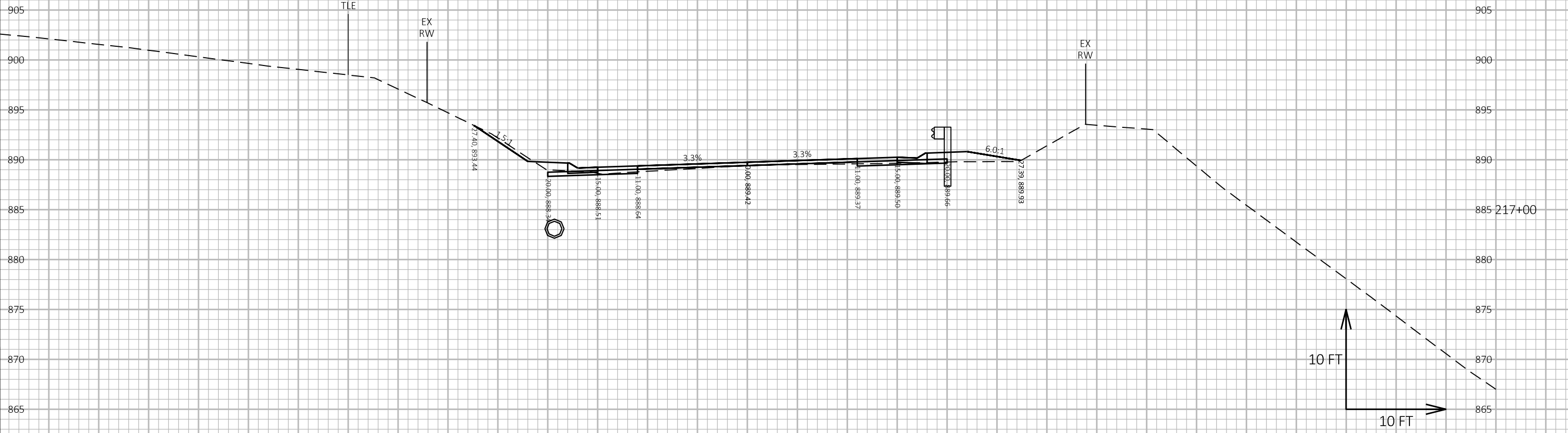
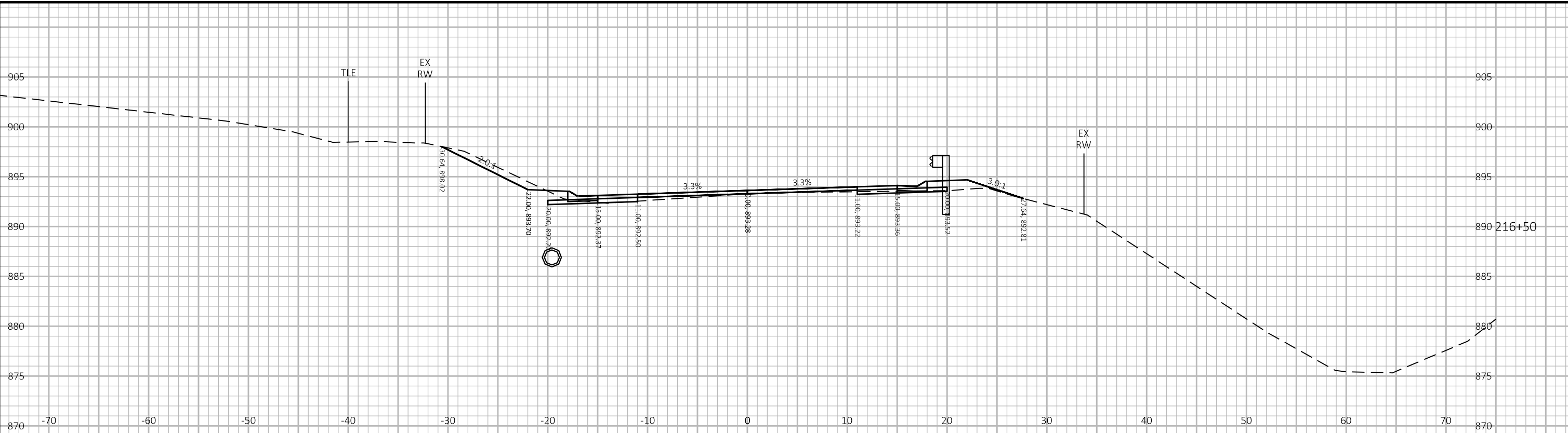


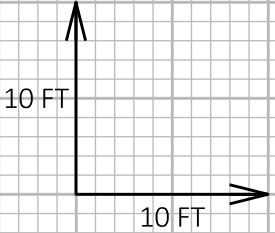
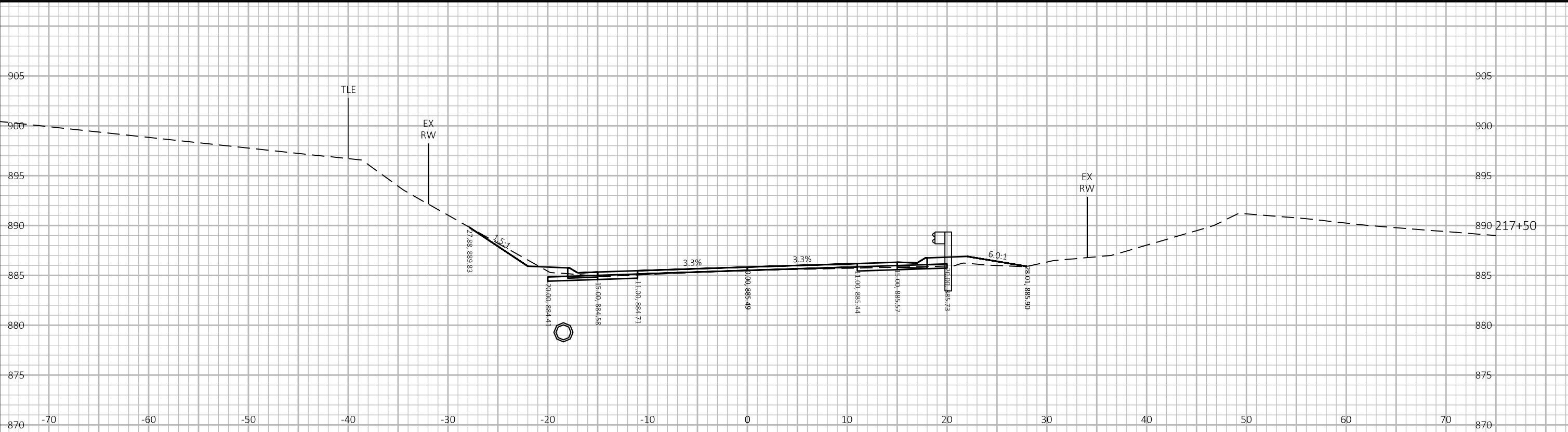






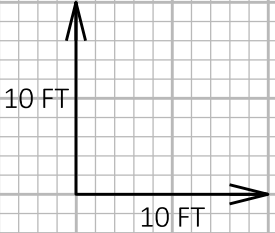
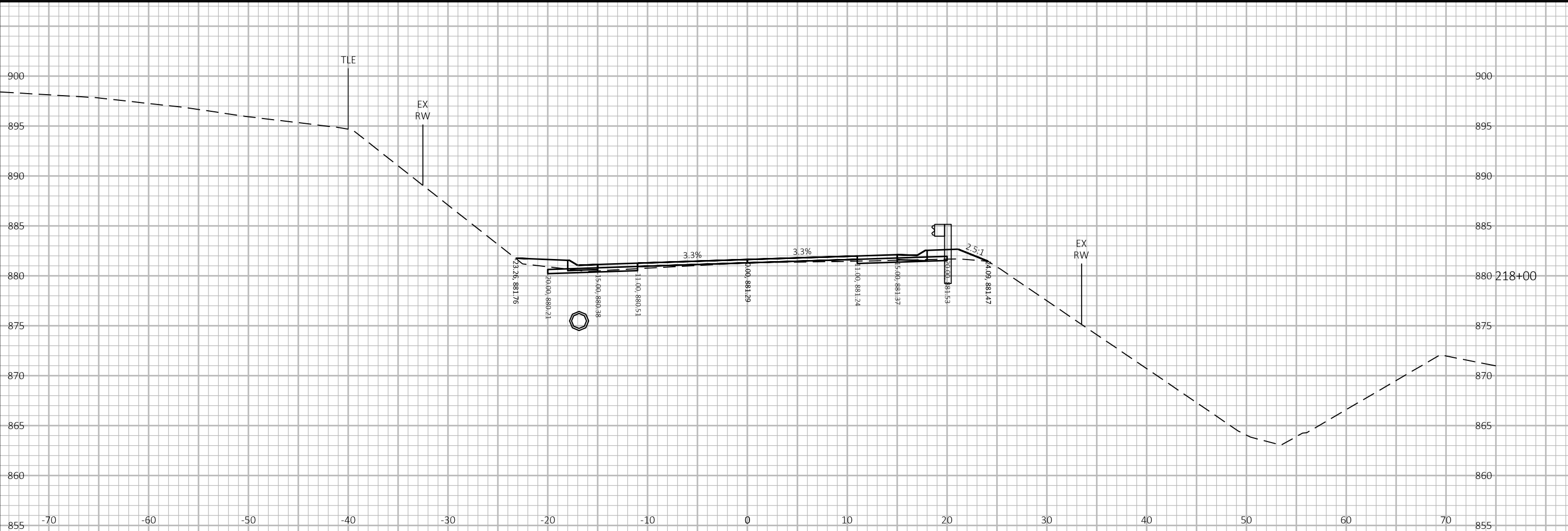






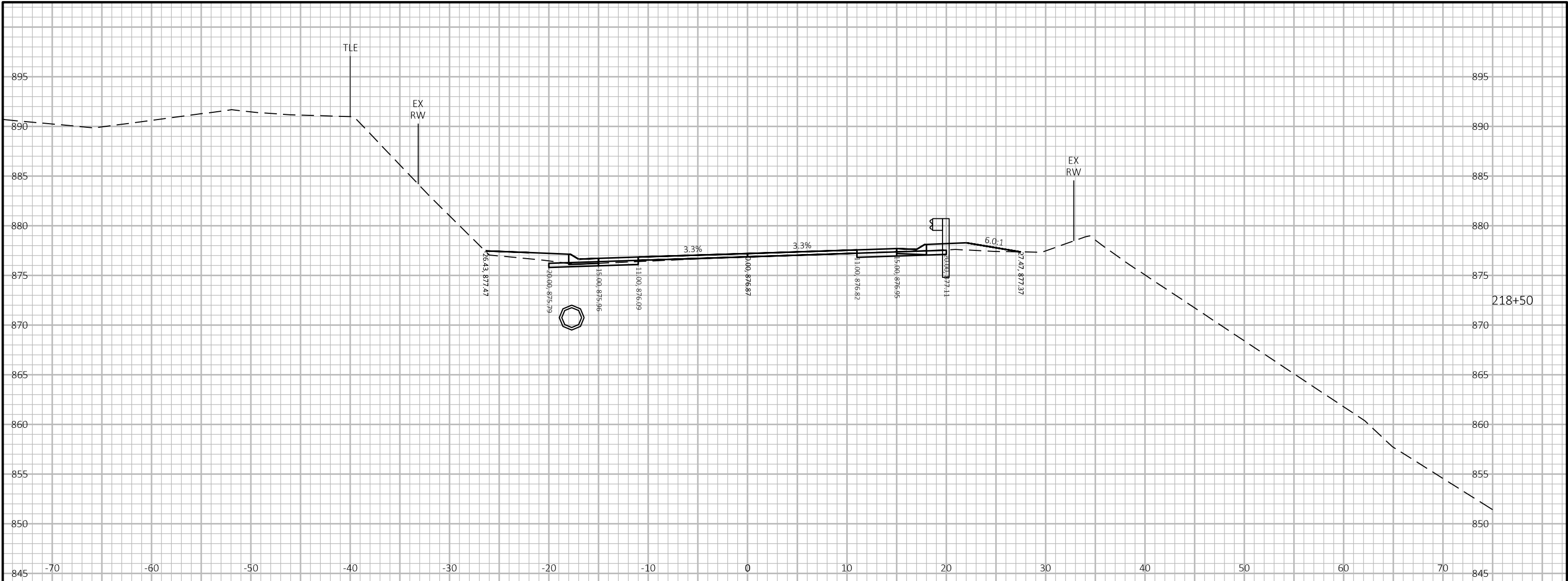
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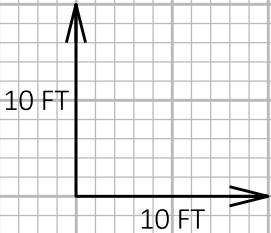


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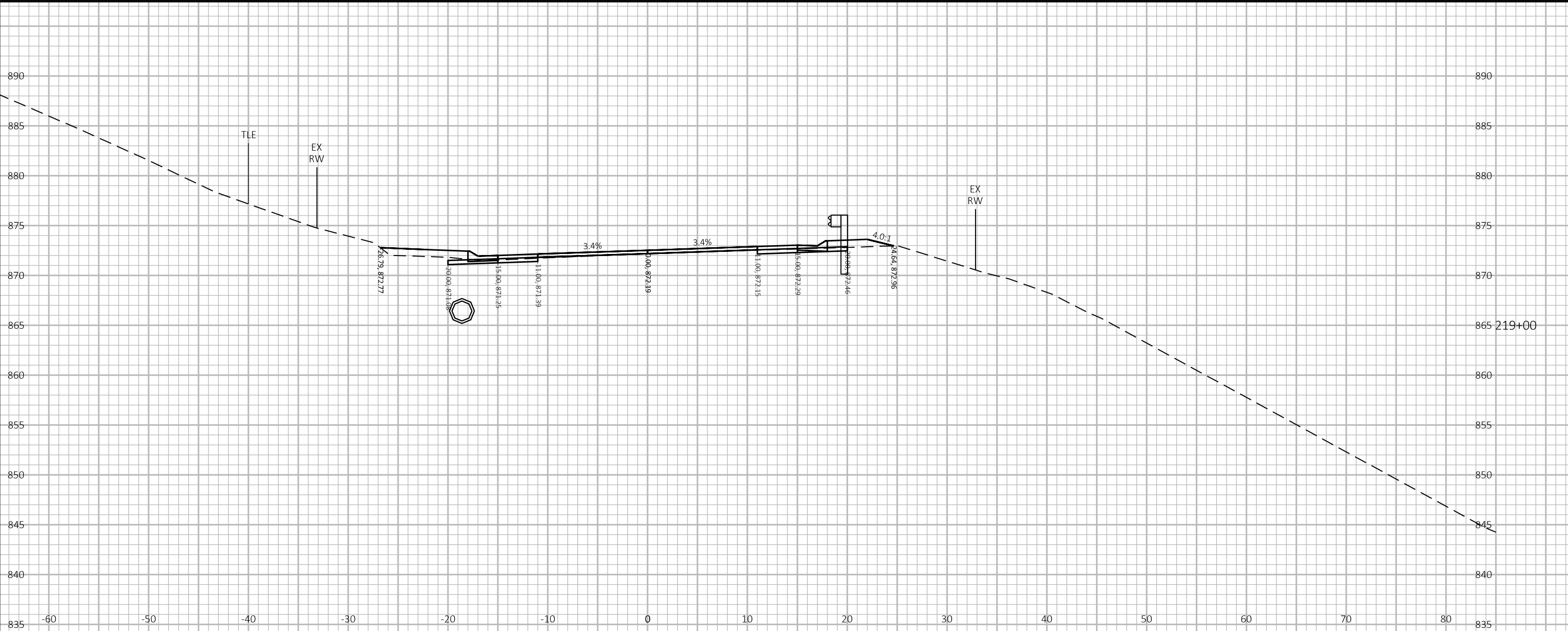


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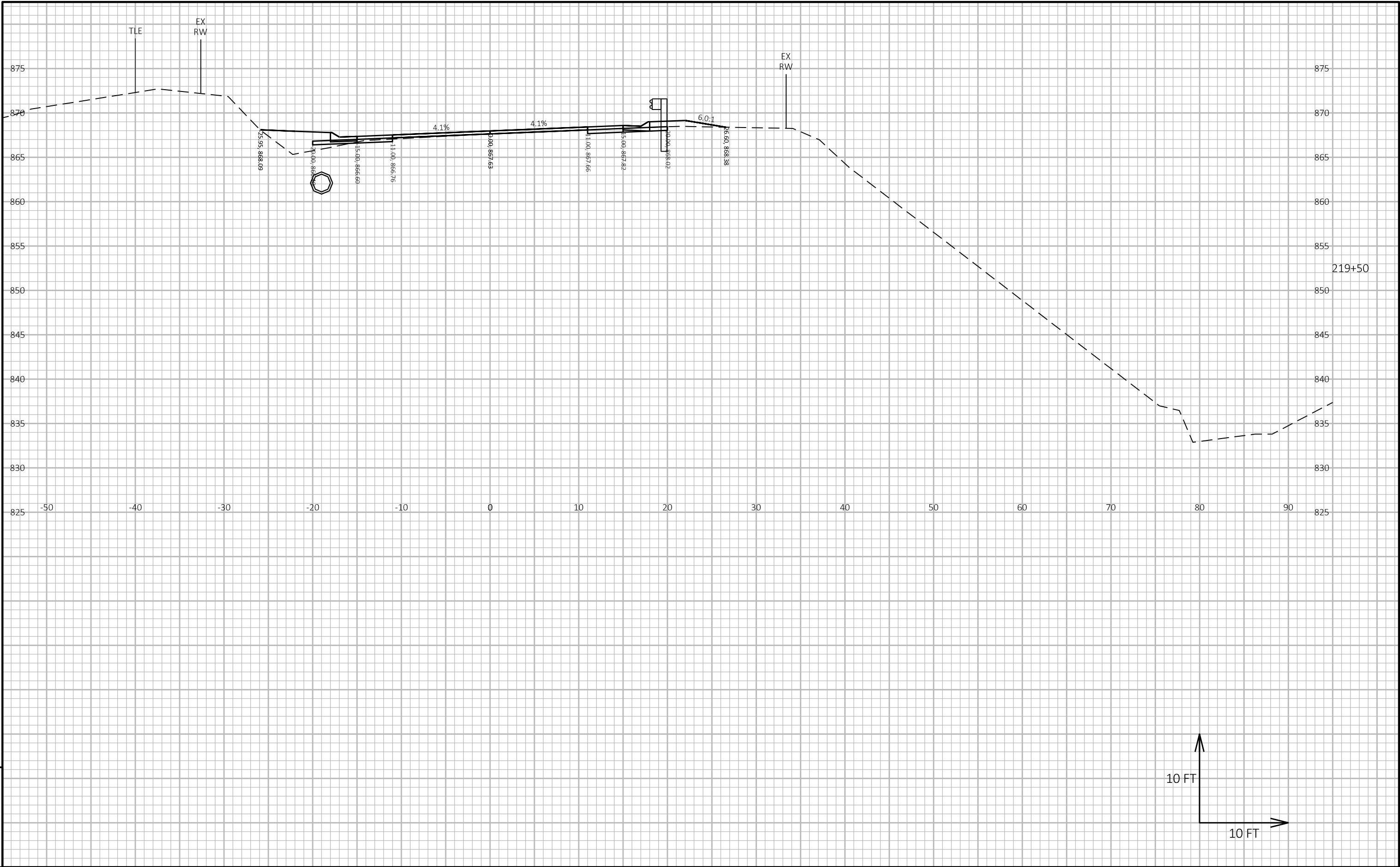
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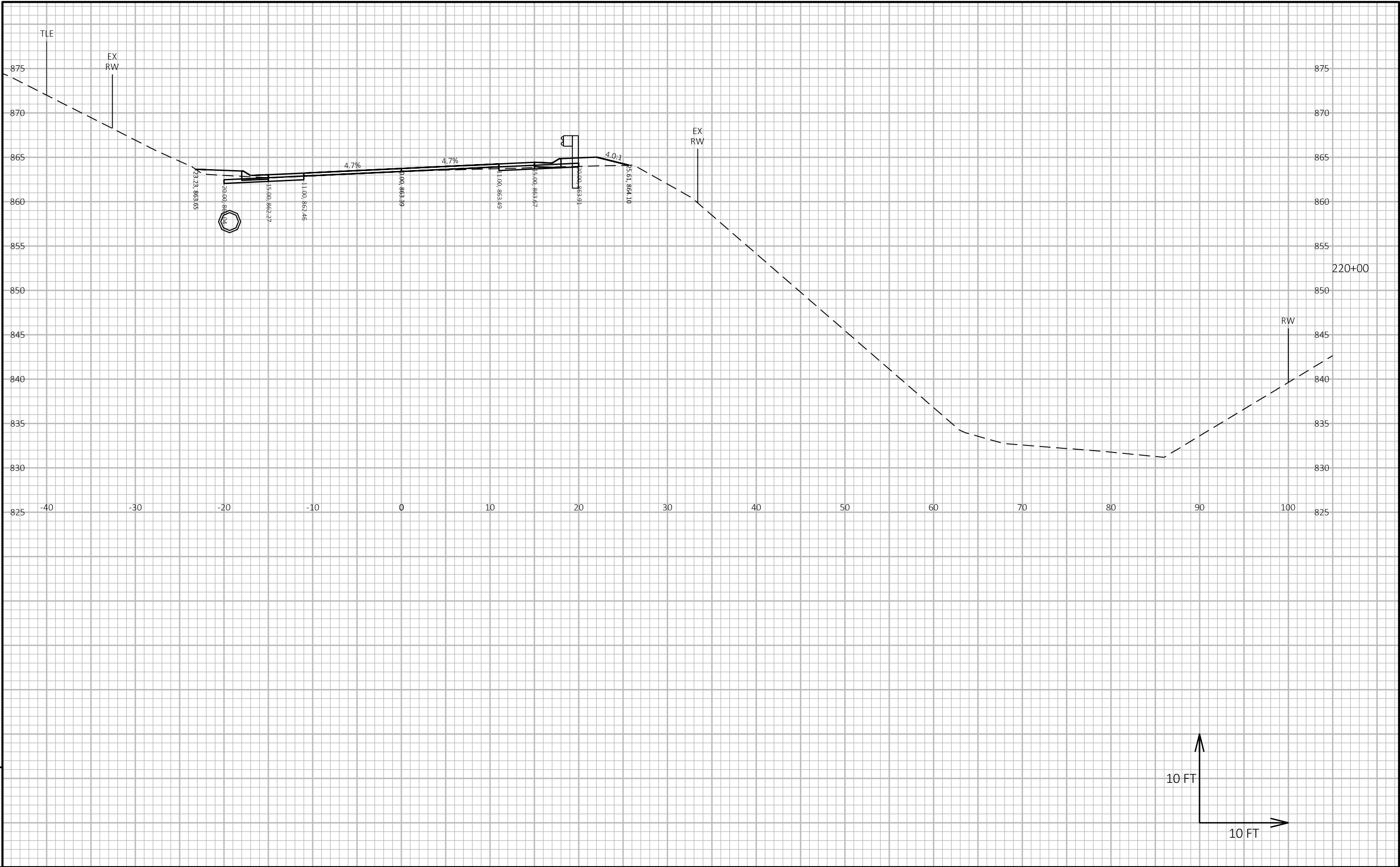
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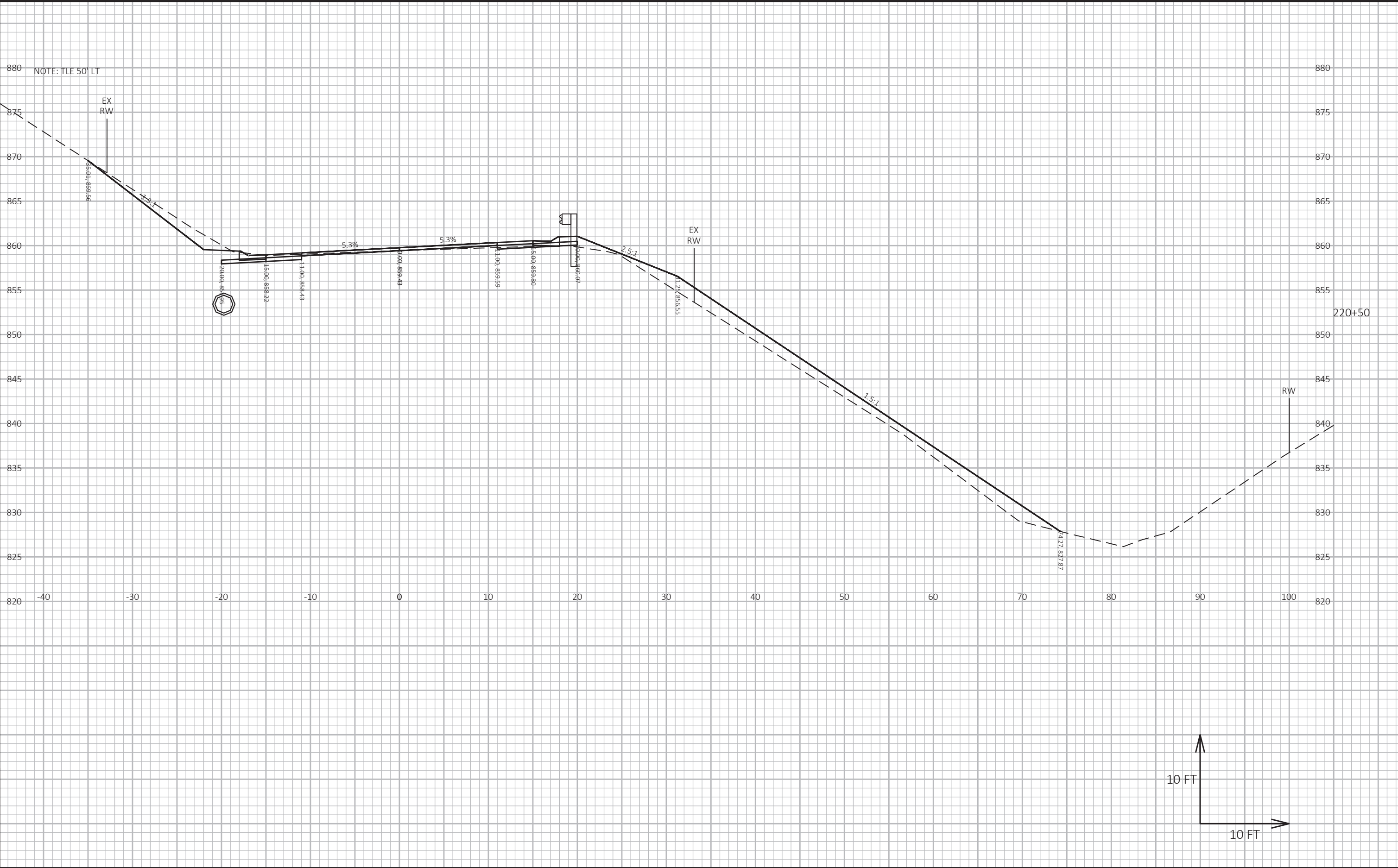
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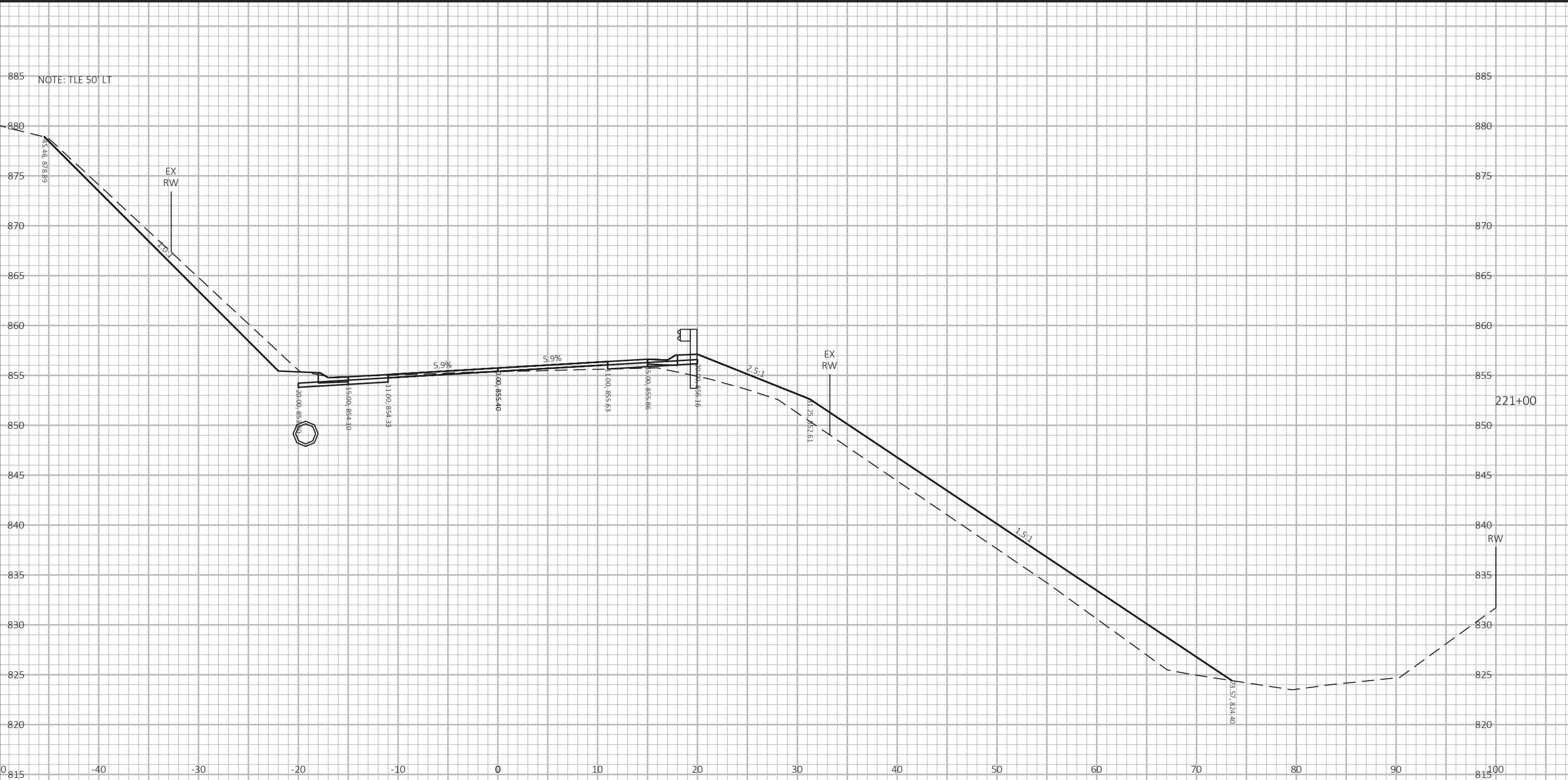
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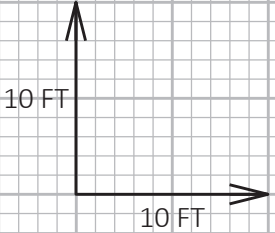
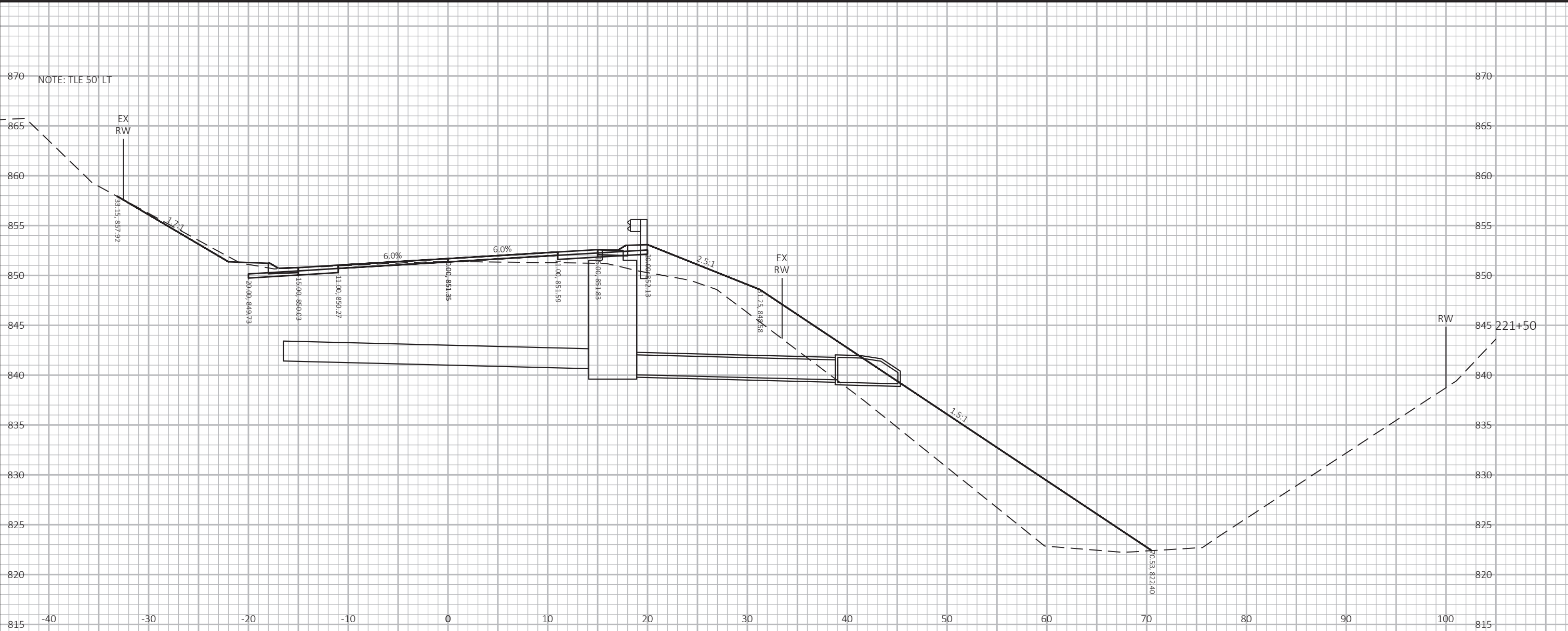
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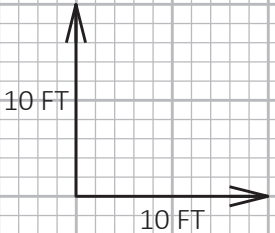
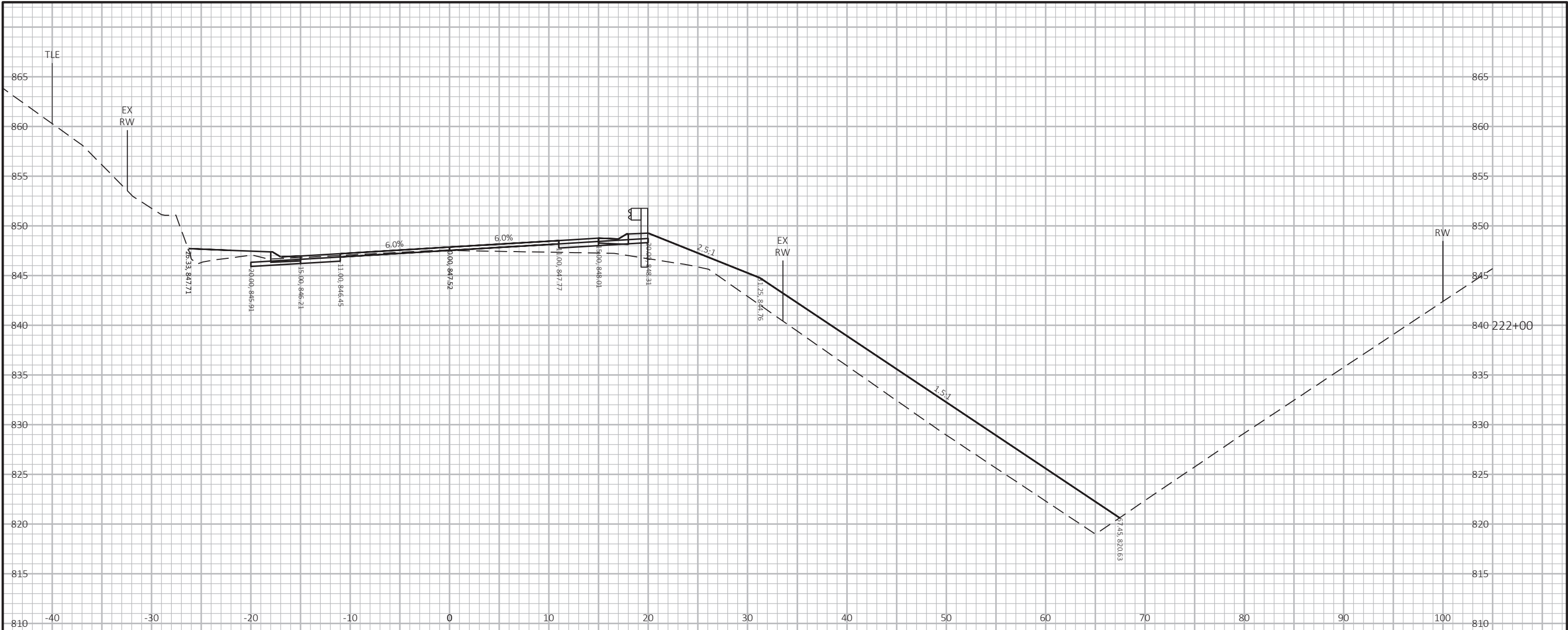
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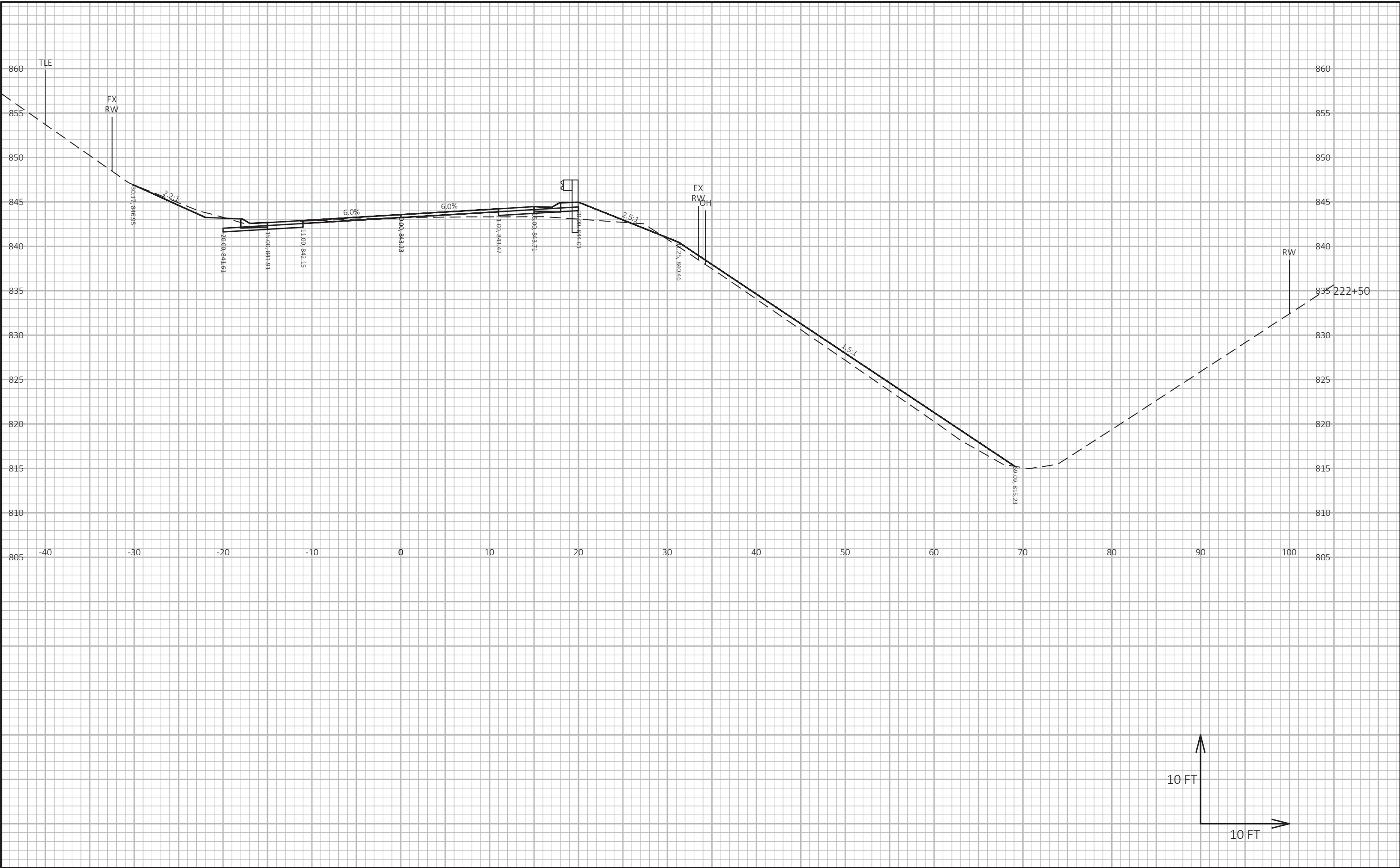
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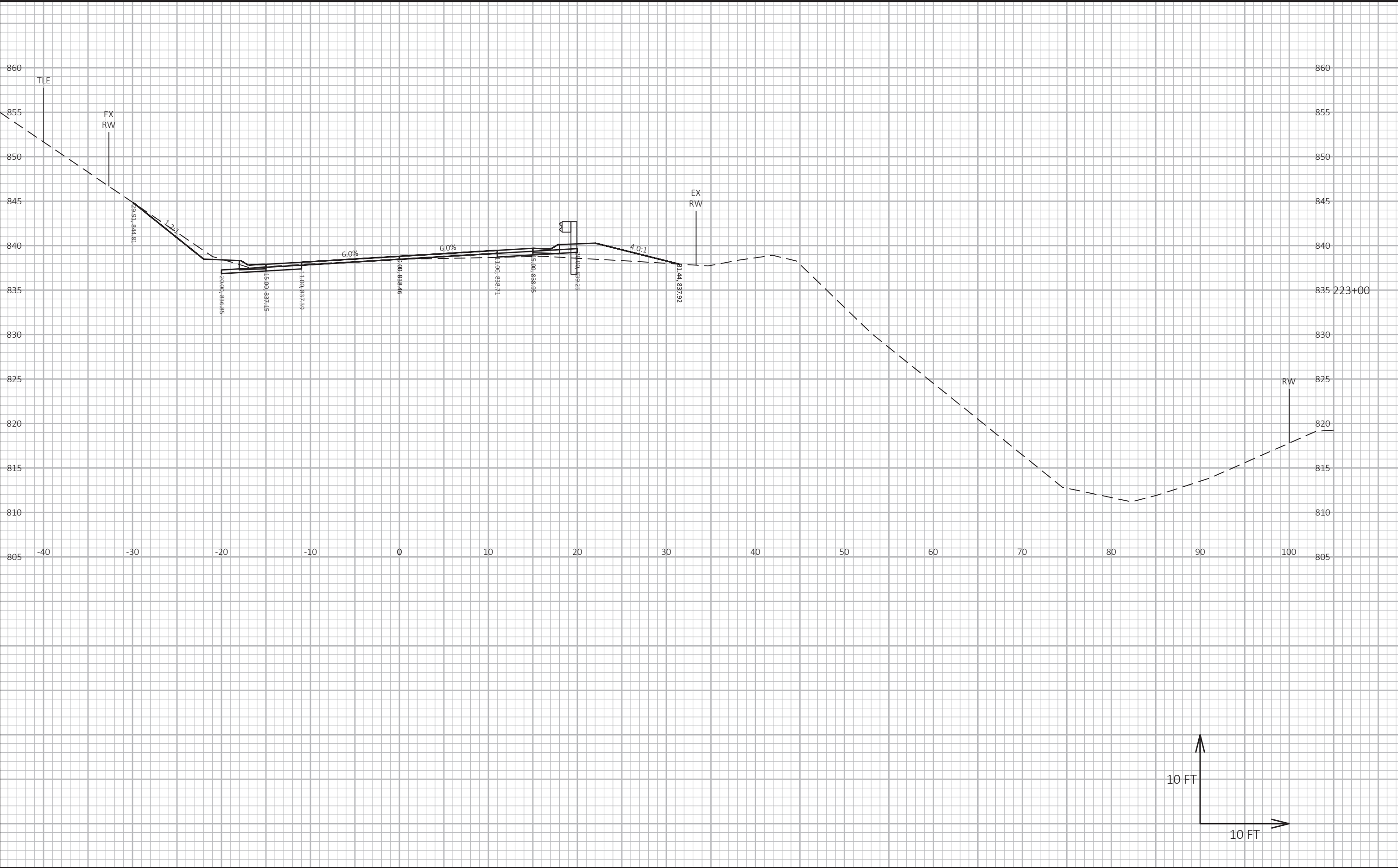
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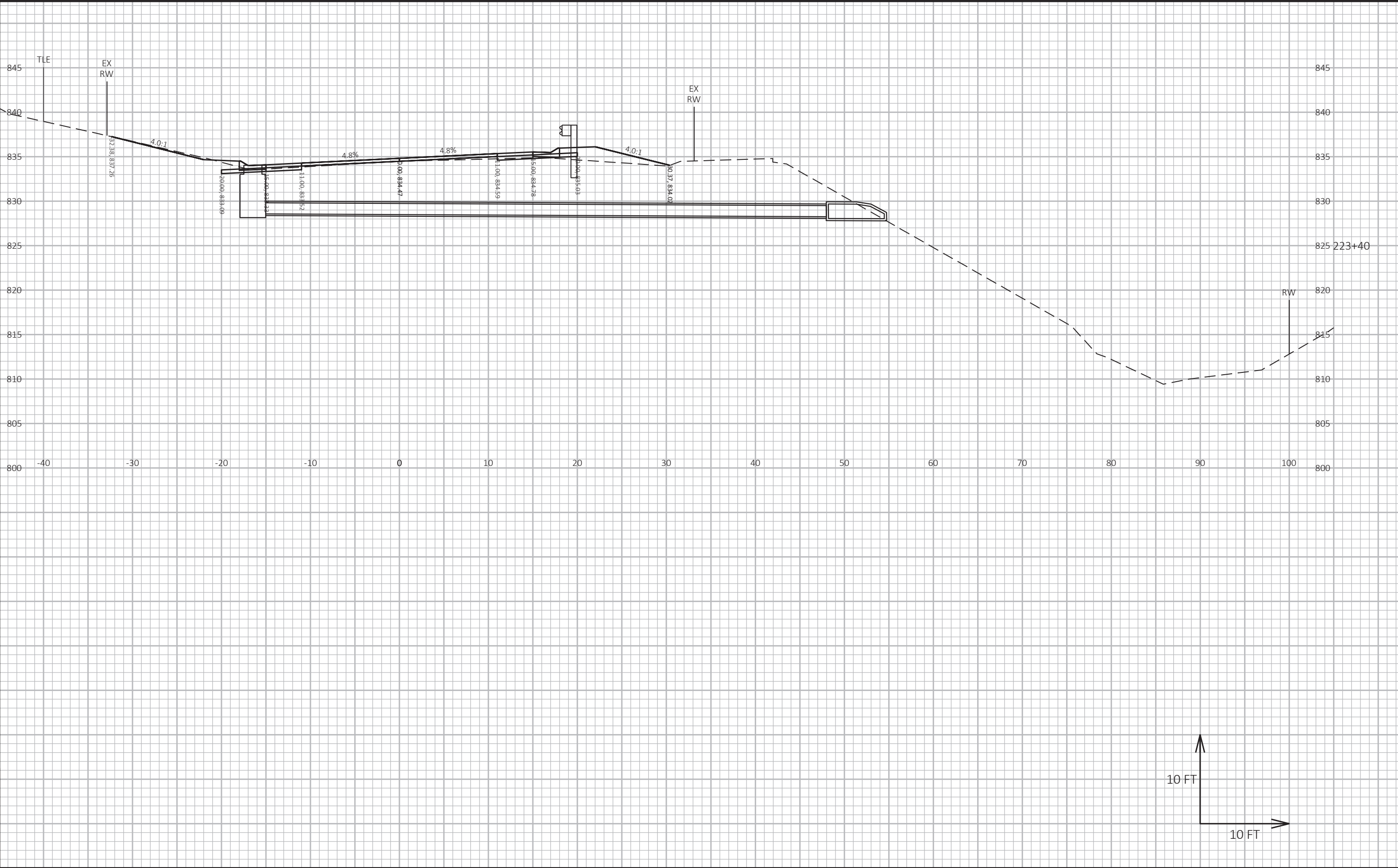


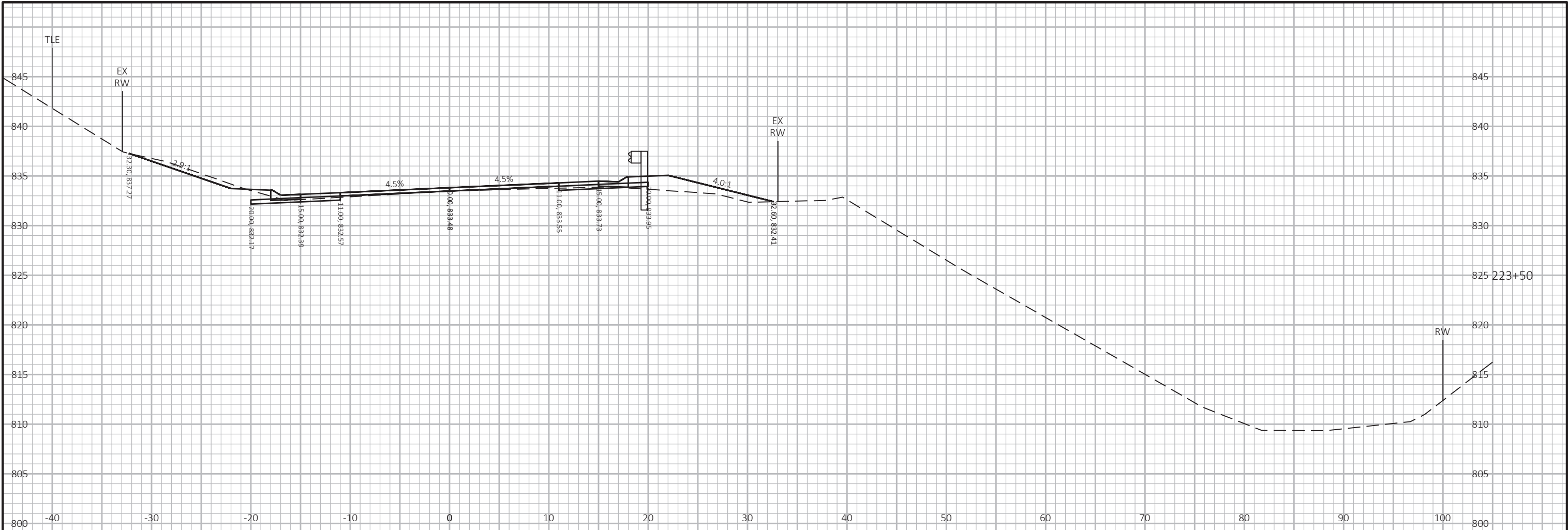


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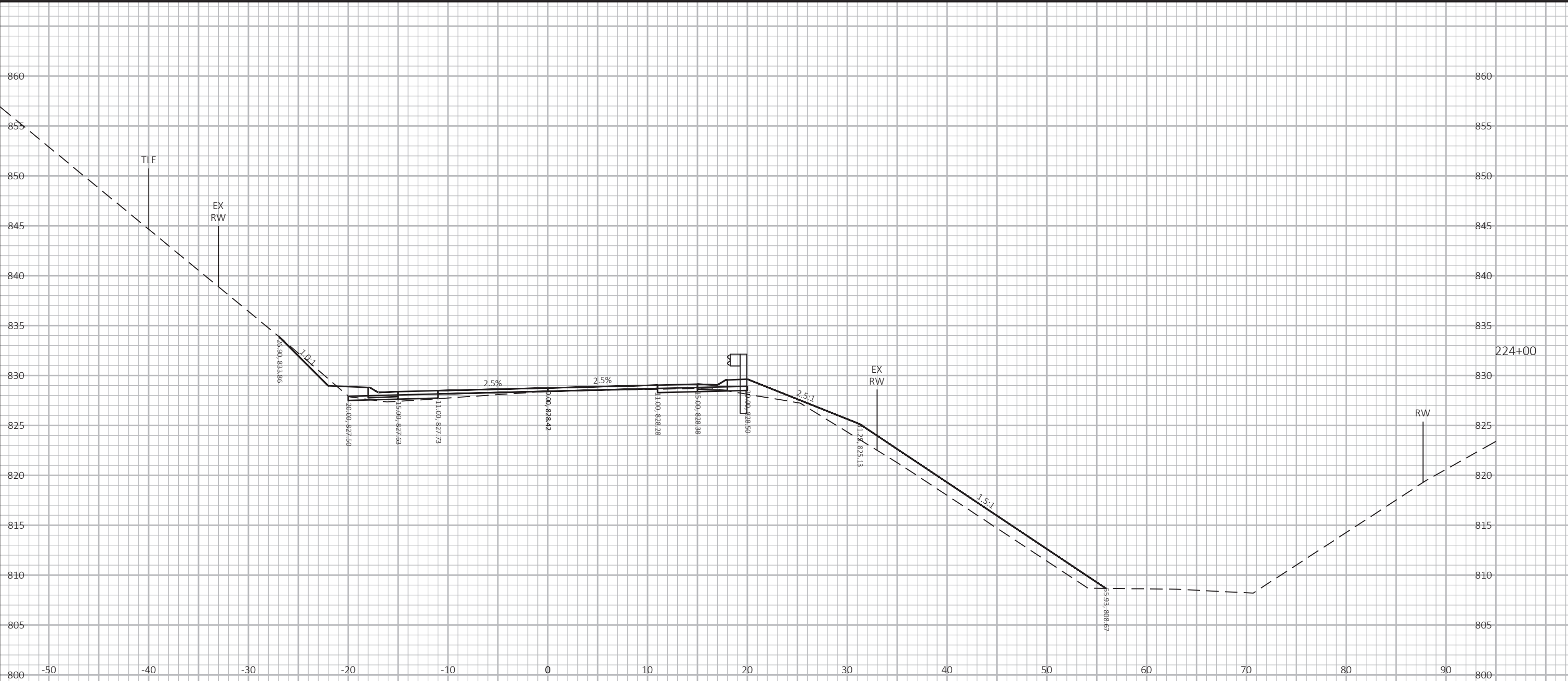






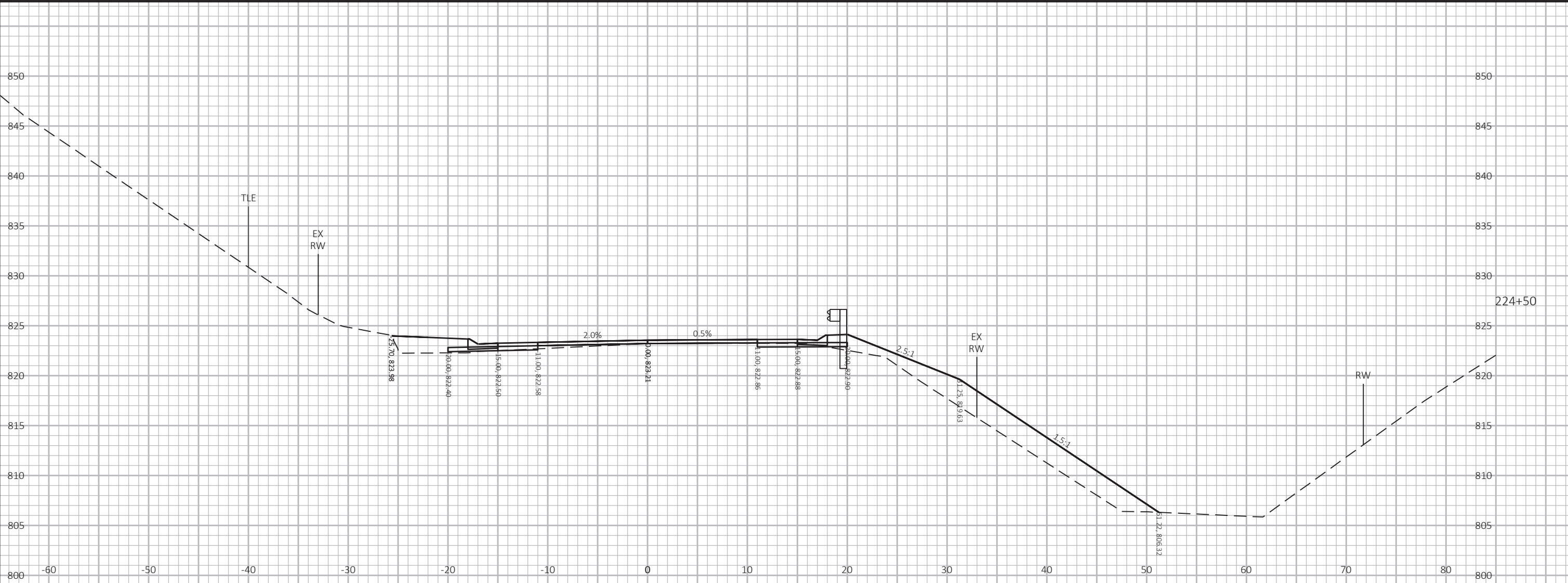
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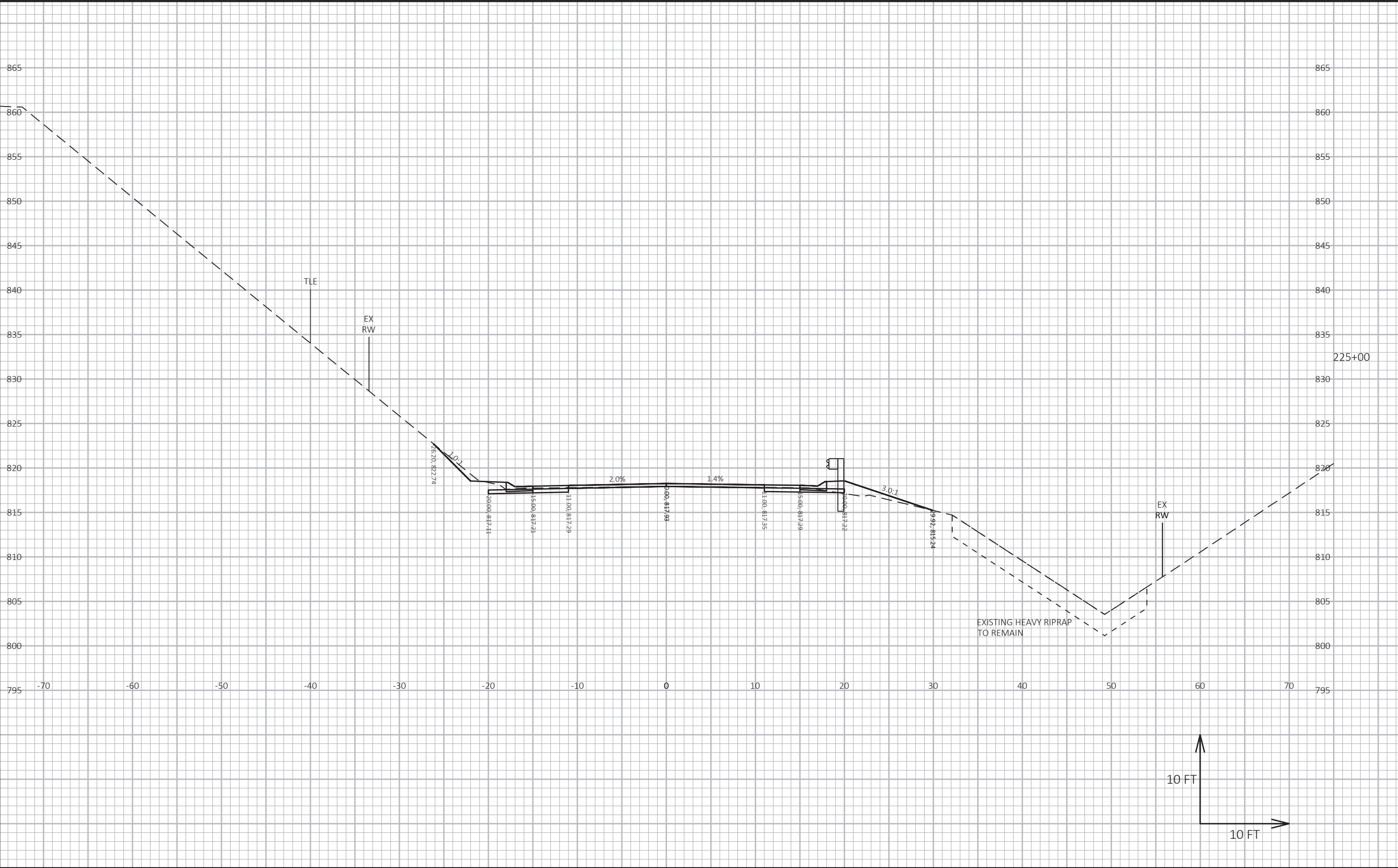
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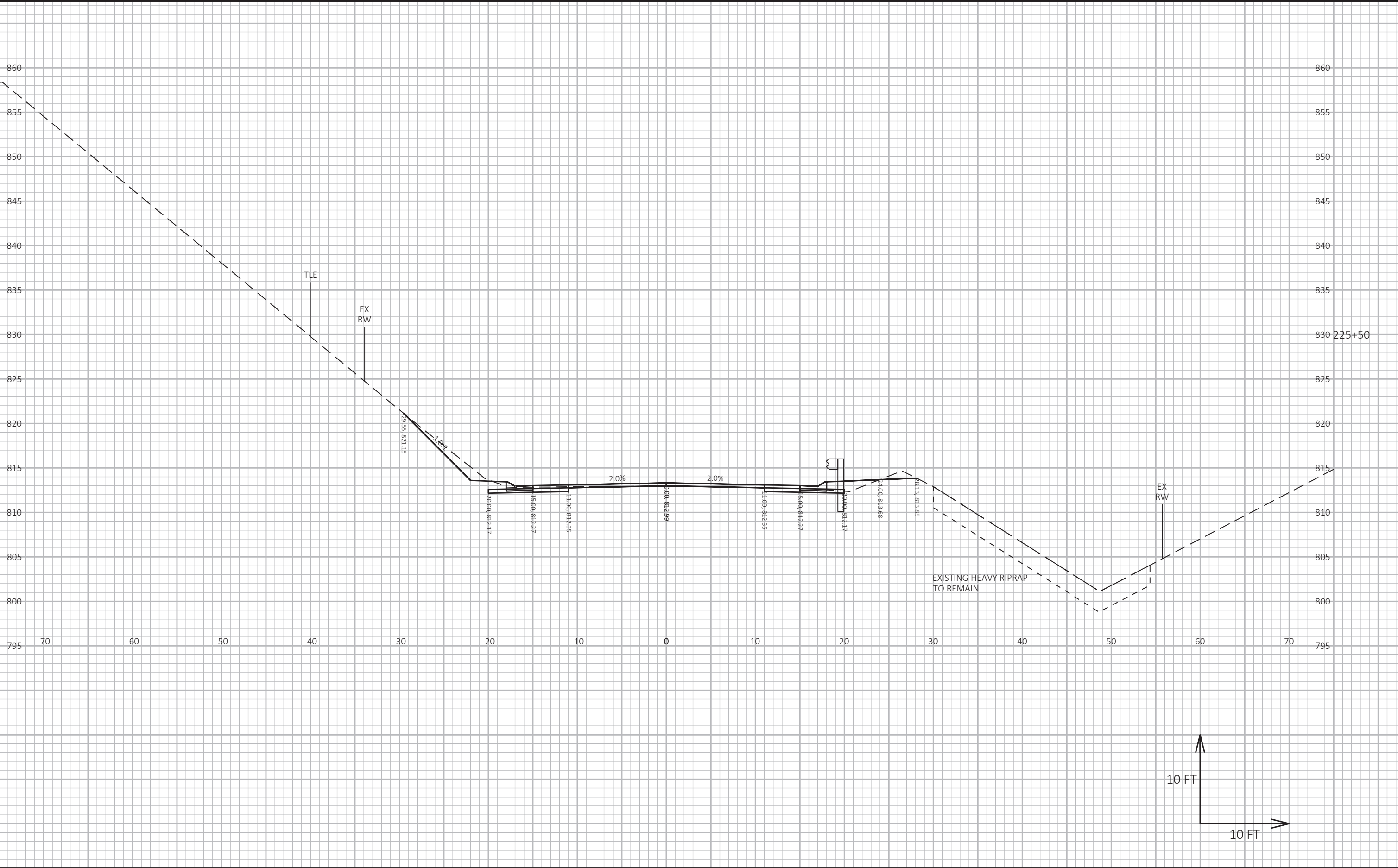
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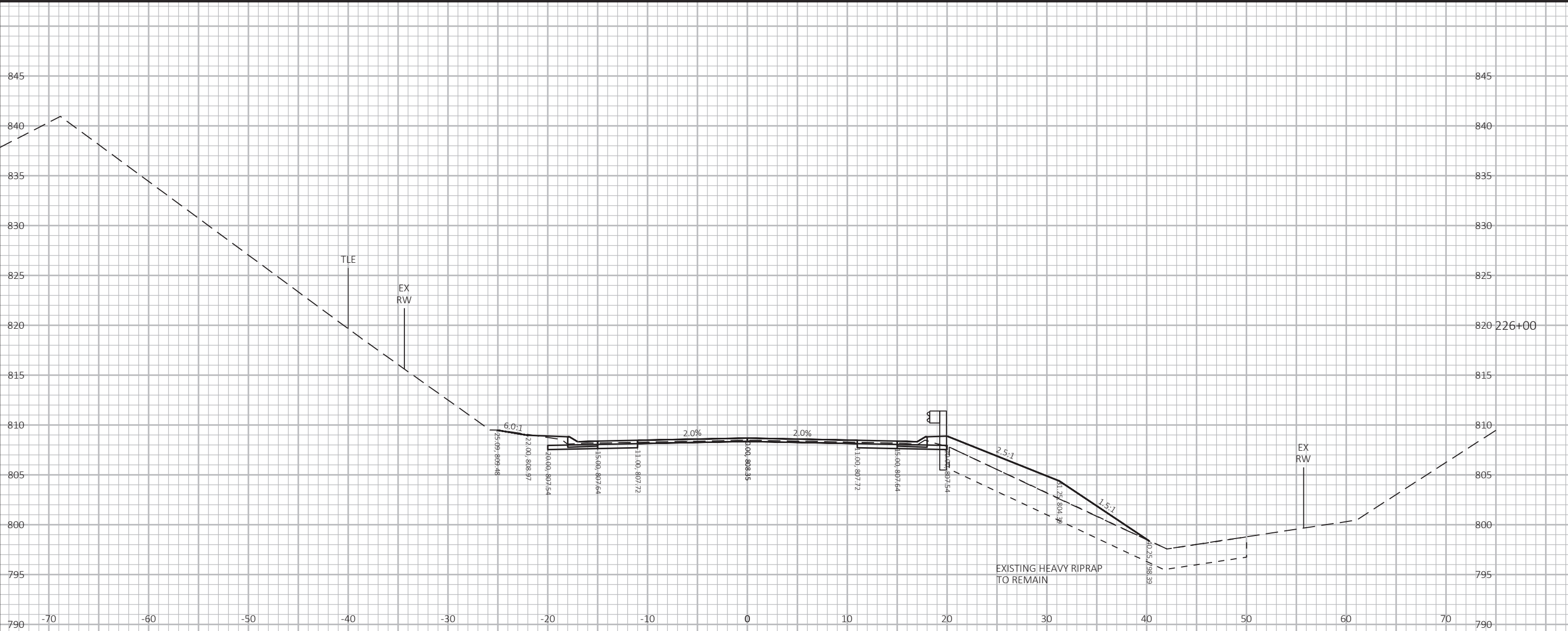


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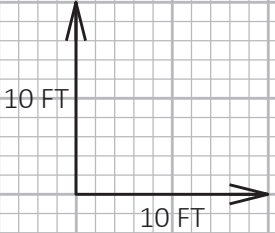
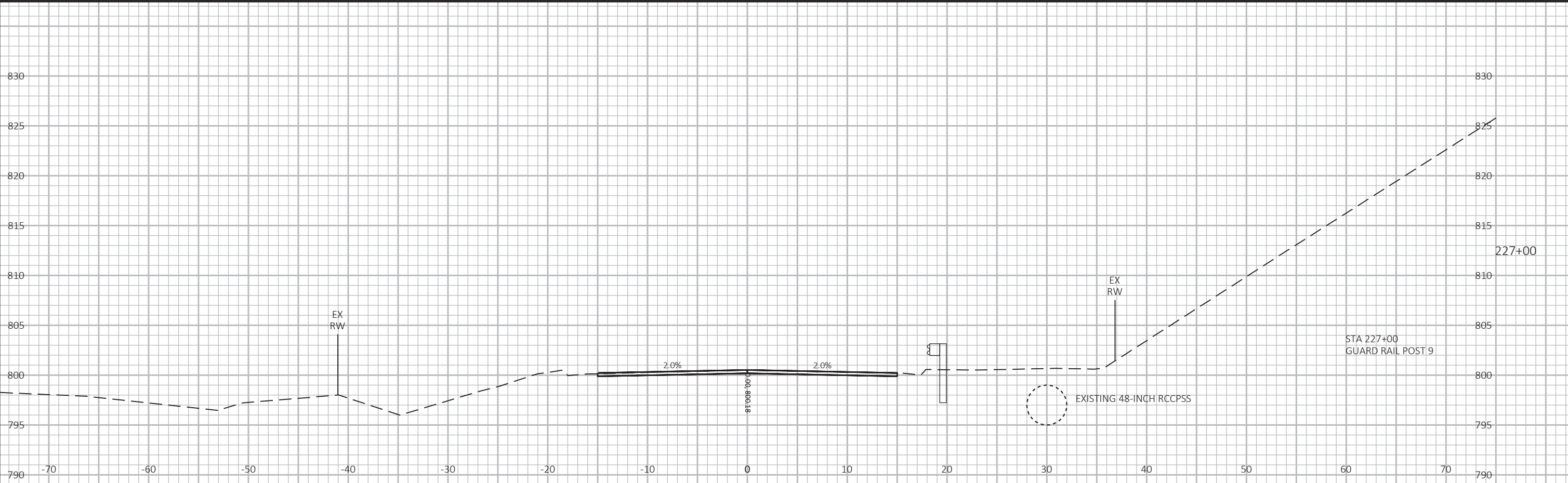






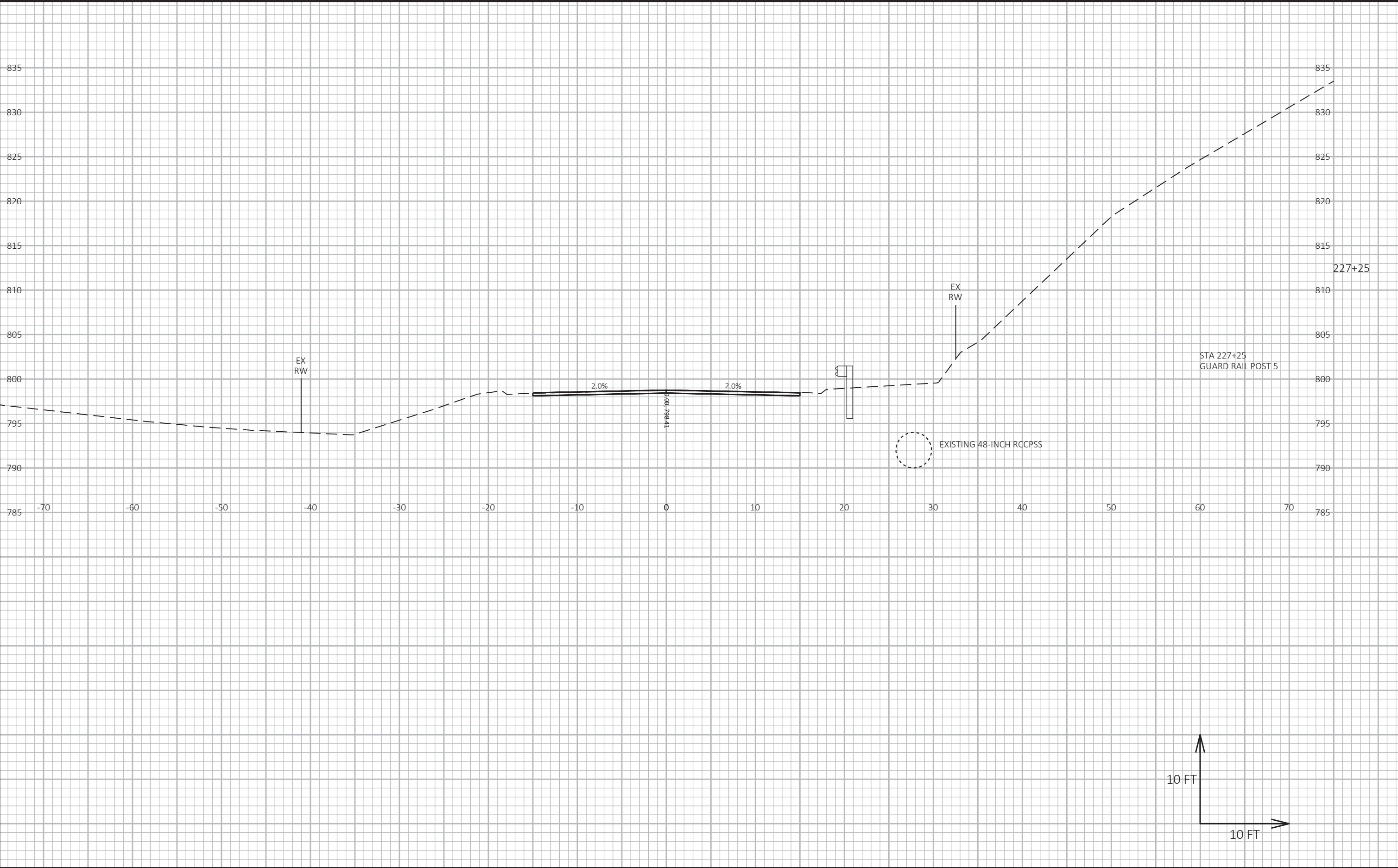
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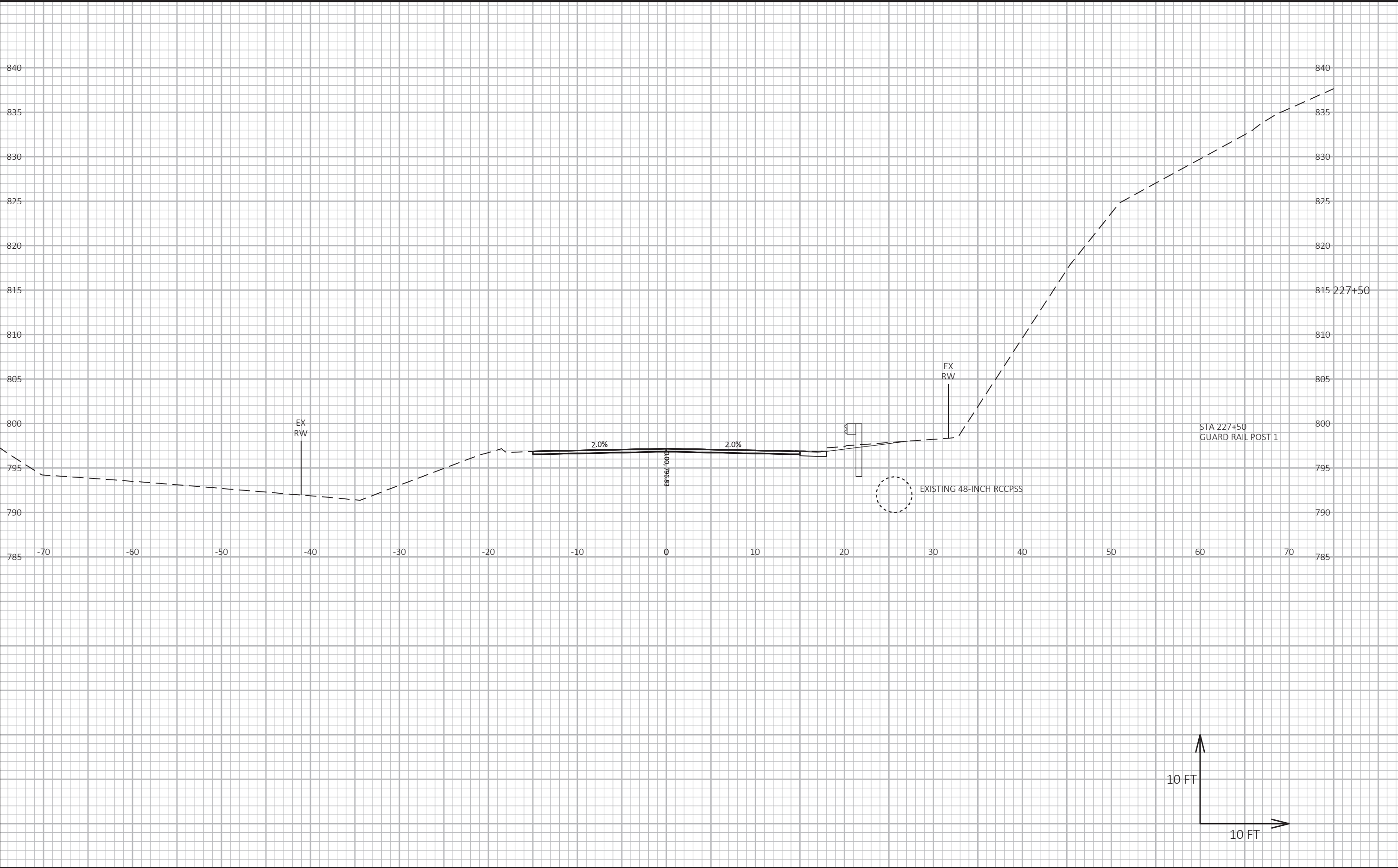
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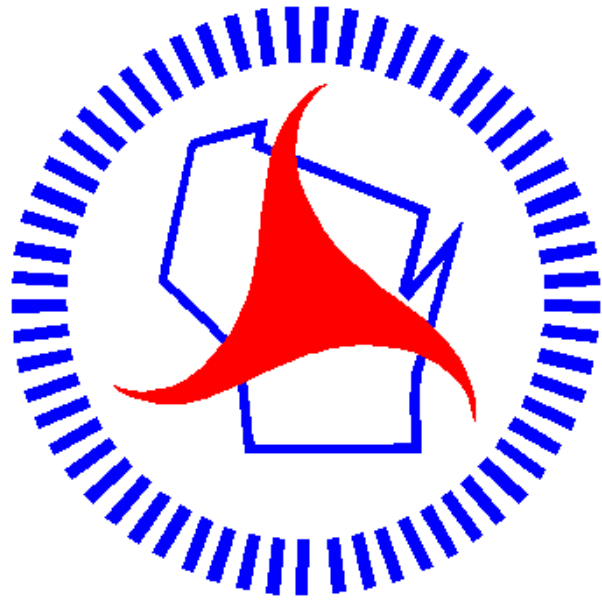
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